



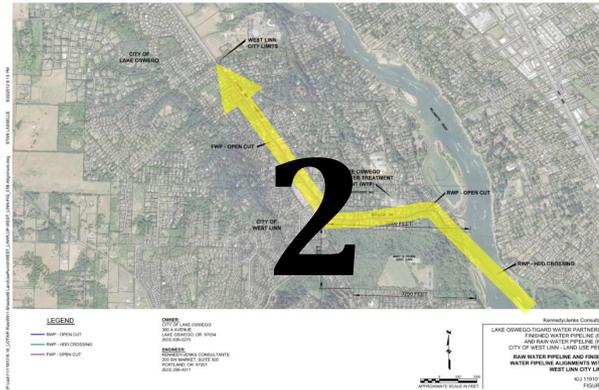
**Lake Oswego - Tigard Water Partnership
Water Treatment Plant
and
Raw- and Finished-water Pipeline**

**AP-12-02
and
AP-12-03**

Presentation Outline



Applicant's proposal/Project Overview



Staff response

WEST LINN PLANNING COMMISSION
FINAL DECISION NOTICE
CUP-12-02/DR-12-04

IN THE MATTER OF THE PROPOSAL FOR A CONDITIONAL USE PERMIT AND CLASS II DESIGN REVIEW FOR THE PROPOSED EXPANSION OF THE CITY OF LAKE OSWEGO WATER TREATMENT PLANT AT 4260 KENTHORPE WAY

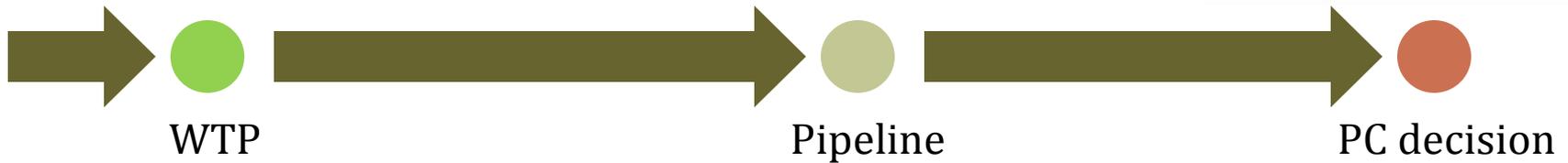
On April 18, 2012 the West Linn Planning Commission conducted a duly noticed public hearing to consider the request by the Lake Oswego-Tigard Water Partnership (Partnership) to expand an existing water treatment plant at 4260 Kenthorpe Way. The applicable review criteria for the Conditional Use and Class II Design Review standards are found in the West Linn Community Development Code (CDC). The approval criteria for Conditional Uses are located in Chapter 60 of the CDC. The approval criteria for Design Review are found in Chapter 55 of the CDC. The hearing was conducted pursuant to the provisions of CDC Chapter 99.

The hearing was continued to April 25 and again on May 2. On May 16, 2012 the applicant submitted a written request to suspend the application for the expansion of the water treatment plant to allow additional work in the areas of concern identified during the public hearing, and to allow procedural consolidation of these applications with a planned additional related application for a pipeline to serve the expanded treatment plant. The Commission granted this request and suspended the hearing on May 16, 2012.

On October 17, 18 and 25, 2012, the Commission reconvened and conducted a duly noticed public hearing. The Commission record consists of all materials from the previous hearings together with the record of the reconvened hearing.

The hearing commenced with a staff report presented by Zach Pelz, Associate Planner, Dennis Koellmermeier, Ed Sullivan, Jon Holland, Carrie Richter and other representatives from the Partnership presented for the applicant. The Commission then opened the hearing to the public, heard a significant amount of testimony and received written argument and evidence. A member of the public requested that the record be left open pursuant to ORS 197.763(6)(b) based on new evidence submitted at the continued hearing. The Commission granted this request, leaving the record open for seven days for all parties to respond to the new evidence. The applicant waived the additional seven day open record period provided by ORS 197.763(6)(e).

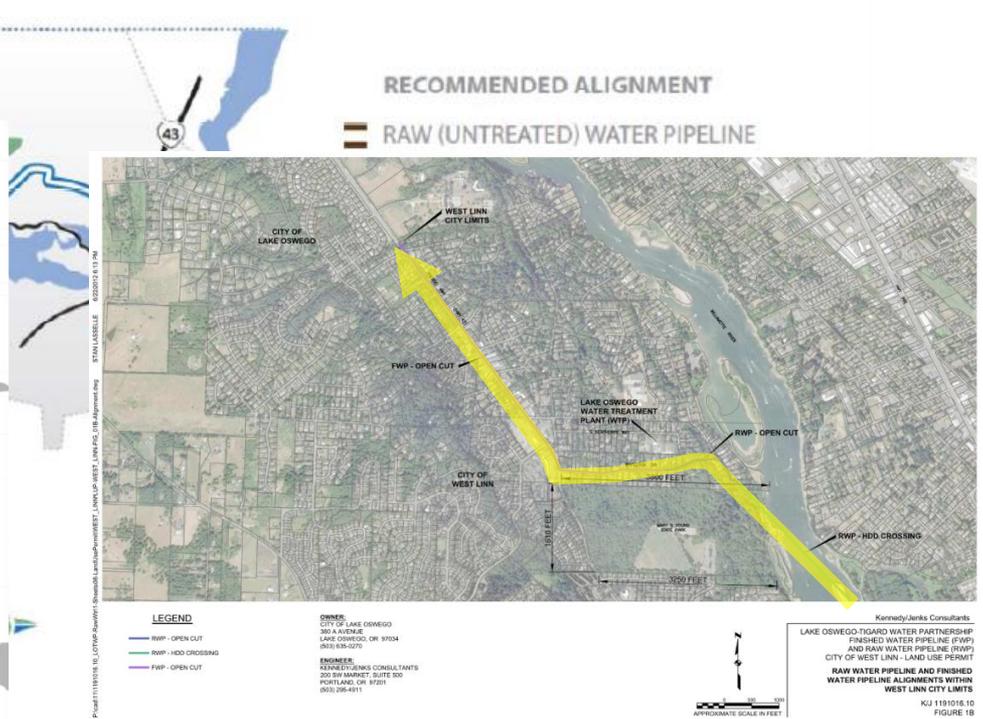
When the Commission reconvened the hearing on November 1, 2012, the applicant responded with rebuttal, followed by questions from the Planning Commission for City staff. The hearing was then closed, and the Planning Commission deliberated to a decision. Following deliberations, a motion was made, seconded, and unanimously passed to deny the application on the following grounds:



Project Overview



Lake Oswego · Tigard
Water Treatment Plant
sharing water · connecting communities



Water Treatment Plant



RWP/FWP



Staff Response



Water Treatment Plant

Cedar Oak School

Cedar Island Park

PREVIOUS APPROVALS:

- 1967: Treatment plant constructed (Clackamas County)
- 1967: Property annexed by City
- 1980: Expansion to 16 mgd
- 1988: CUP and DR for minor changes and addition of drying beds
- 1996: CUP and DR for remodel and update to WTP
- 2011: Lot line adjustment

SITE

Area: 9.2 acres

Owner/App.: LOWTP

Zoning: R-10

Comp Plan: LDR



Water Treatment Plant



RWP/FWP



Staff Response

Existing Conditions (surrounding properties)



1
Kenthorpe Way Looking East



2
Kenthorpe Way Looking West



11
Private Property on Northwestern Corner



3
View Along Eastern Side of Property



10
Wooded Area within Western Property Boundary



4
View Out from East Property Corner



9
View from Private Property on West Side



8
Looking North from Southwest Corner



7
Looking West along Mapleton Drive



6
Southeast Property Corner



5
View South along East Boundary



Water Treatment Plant



RWP/FWP



Staff Response

Existing Site Conditions



Water Treatment Plant



RWP/FWP



Staff Response

Existing Site Conditions



Water Treatment Plant



RWP/FWP



Staff Response



Existing treatment facilities



Water Treatment Plant



RWP/FWP

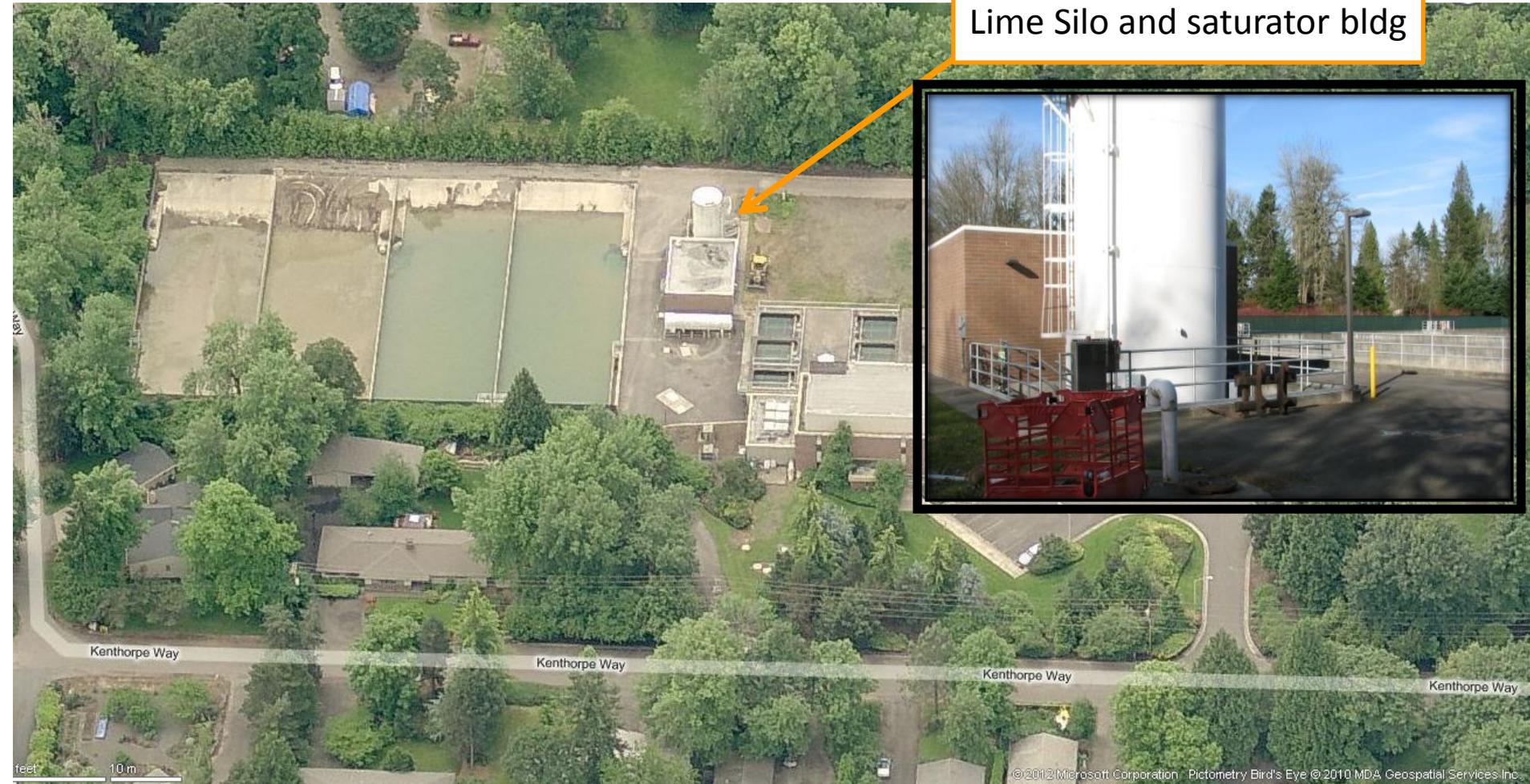


Staff Response



Existing treatment facilities

Lime Silo and saturator bldg



Water Treatment Plant



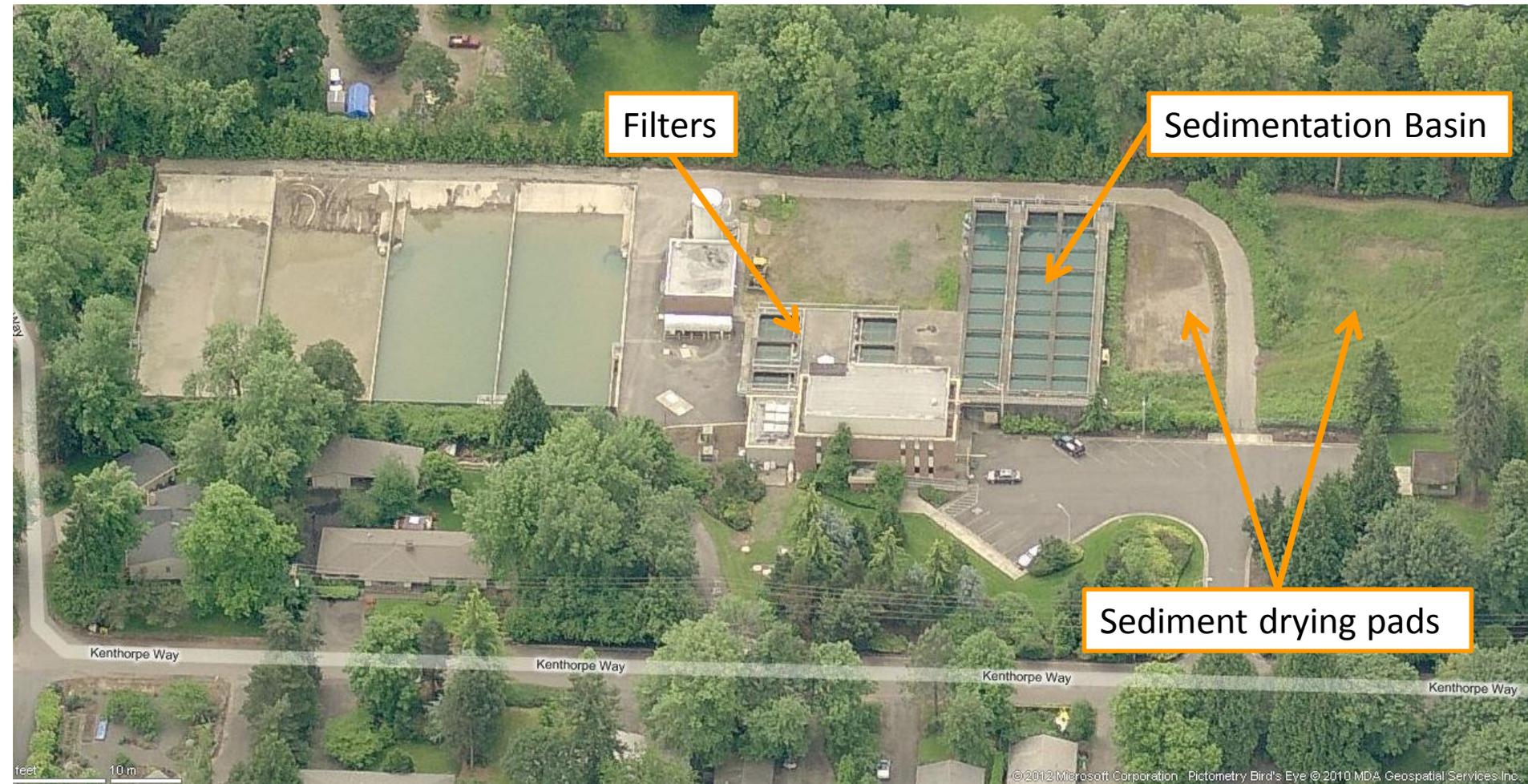
RWP/FWP



Staff Response



Existing treatment facilities



Water Treatment Plant



RWP/FWP



Staff Response



Existing treatment facilities



Chemical storage



Admin/Operations building

Perimeter Conditions



Water Treatment Plant



RWP/FWP



Staff Response

Perimeter Conditions



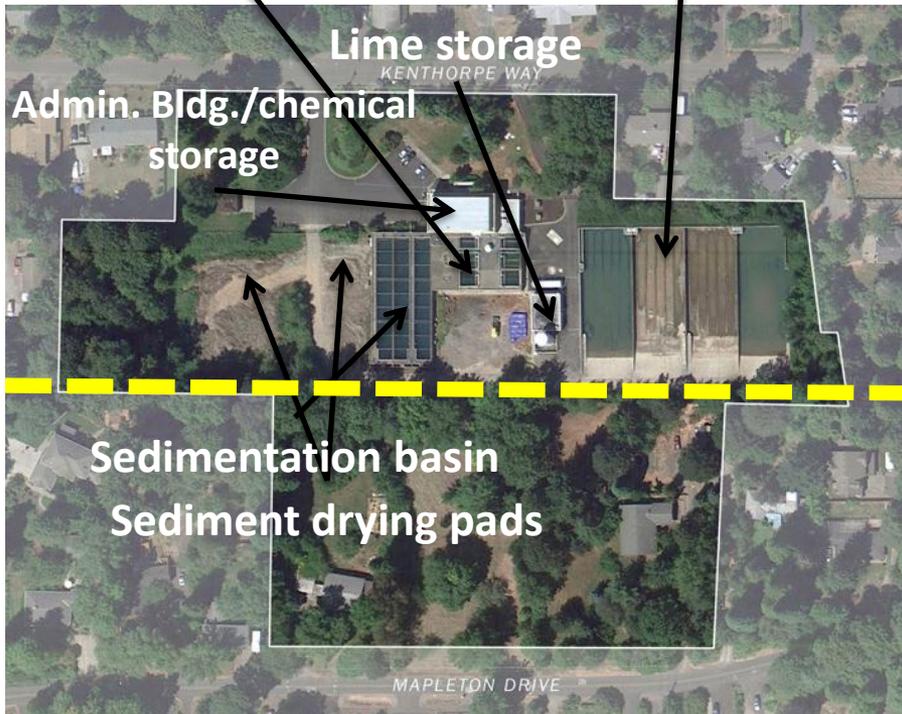


Water Treatment Plant- Existing and Proposed

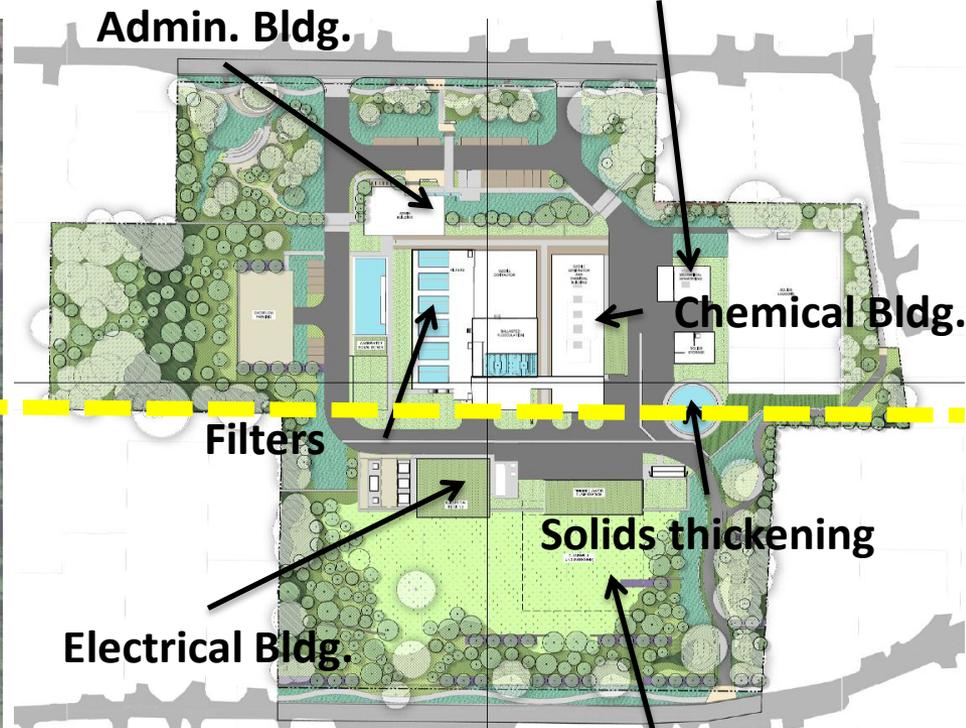
Filters

Solids drying lagoons

Mechanical dewatering



Existing



Proposed

Clearwell



Water Treatment Plant

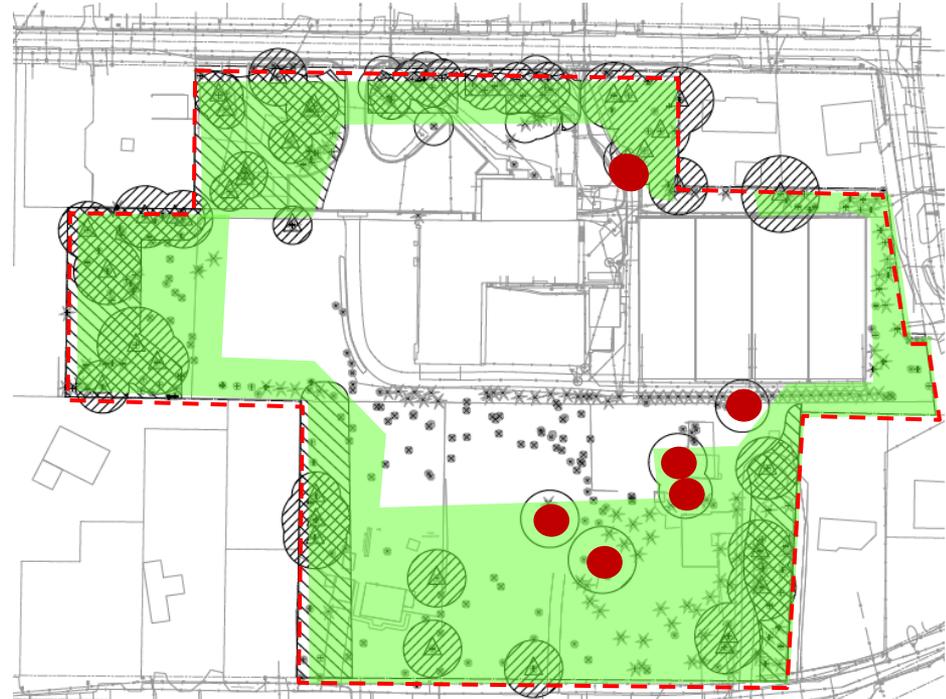


RWP/FWP



Staff Response

Significant tree removal – 6/42 significant trees removed



Water Treatment Plant



RWP/FWP



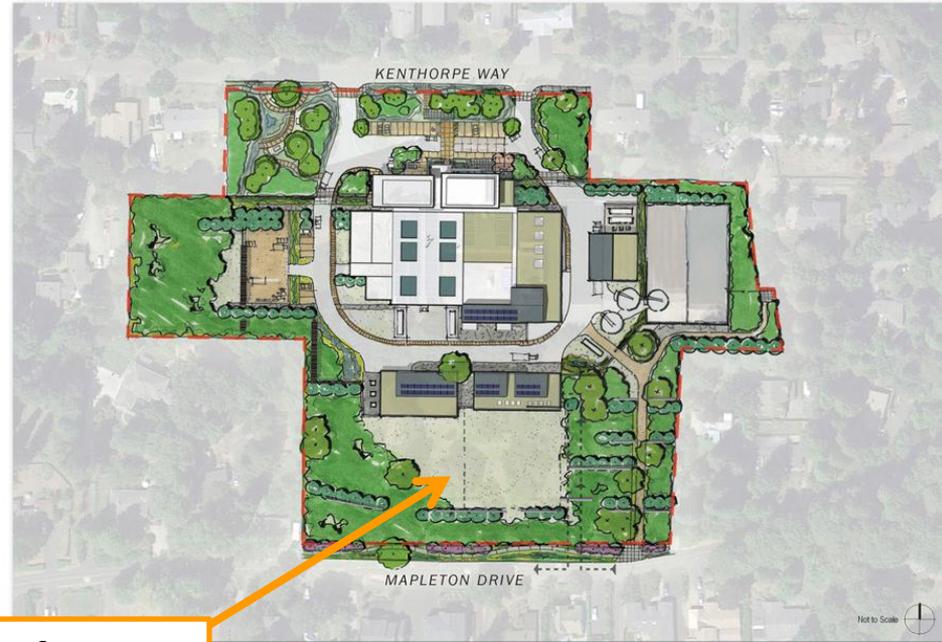
Staff Response

Proposed Site Plan



Existing

Removal of two existing SFH on Mapleton



Proposed



Water Treatment Plant



RWP/FWP



Staff Response

Water Treatment Plant – revisions to Proposed Site Plan



Before



After

**Ops. Bldg.
removed**

**Parking
reconfigured**



Water Treatment Plant



RWP/FWP

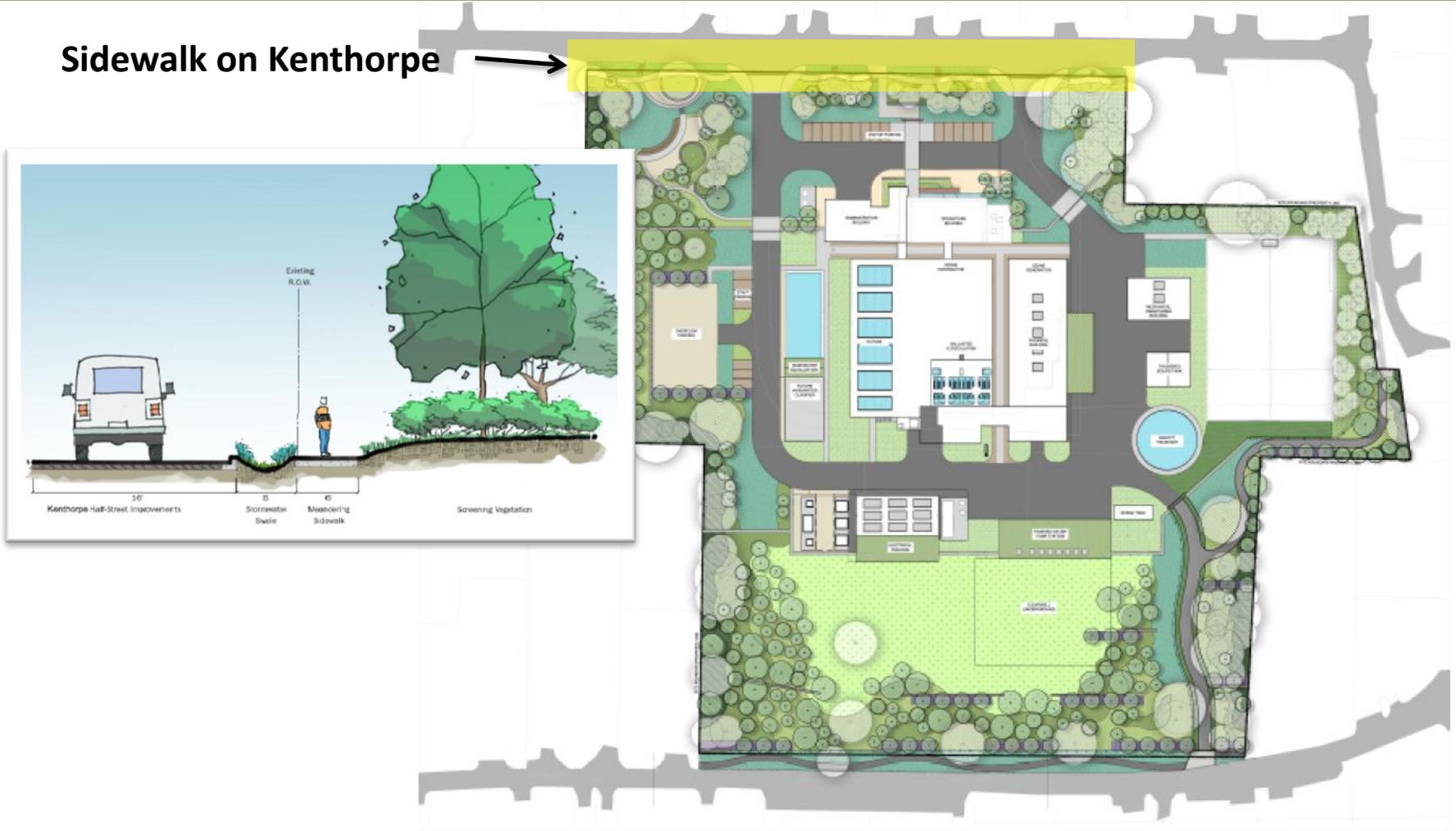


Staff Response



Water Treatment Plant – Access

Sidewalk on Kenthorpe



Water Treatment Plant



RWP/FWP



Staff Response



Water Treatment Plant – Access

Outdoor green space



Water Treatment Plant

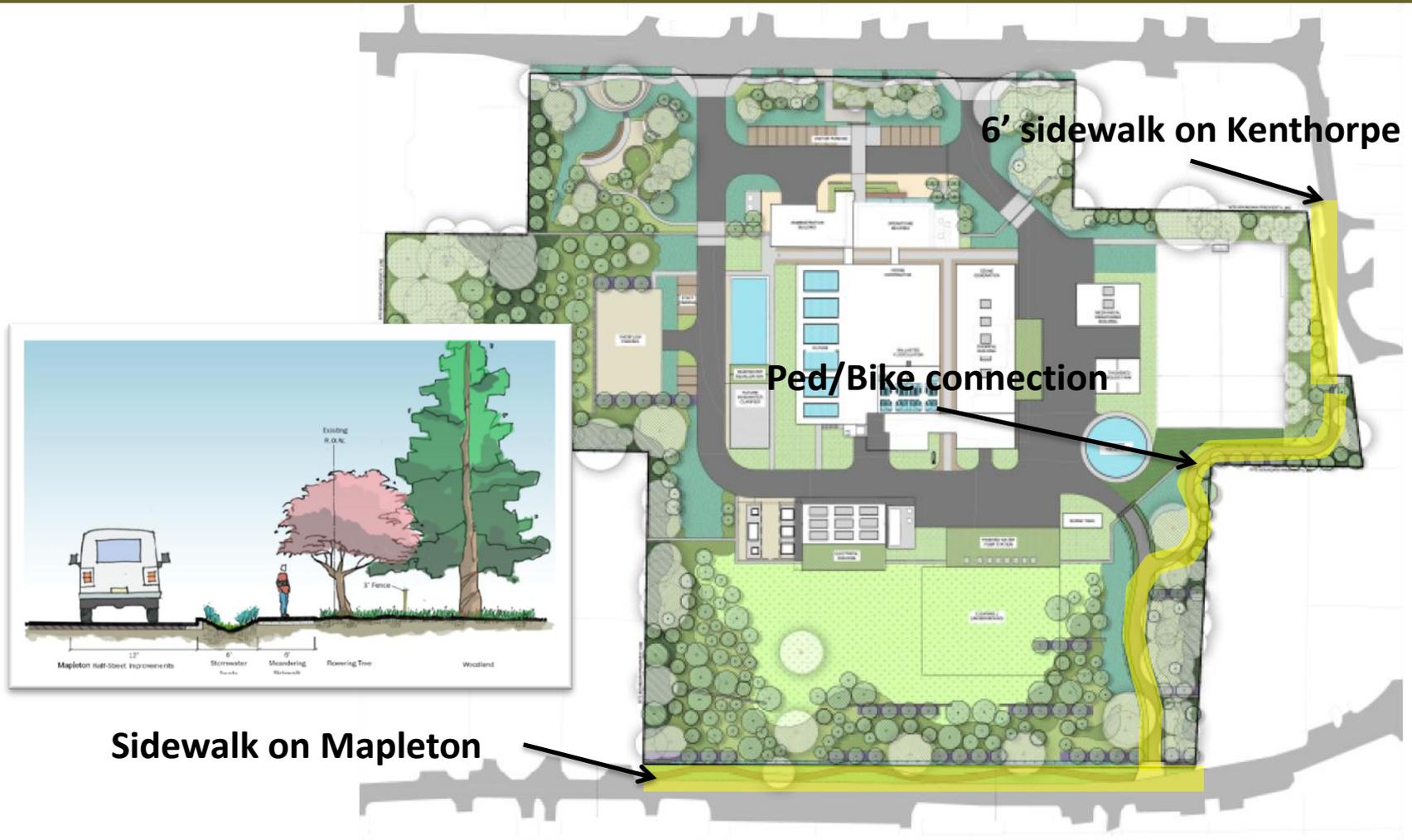


RWP/FWP



Staff Response

Water Treatment Plant – Access



Water Treatment Plant

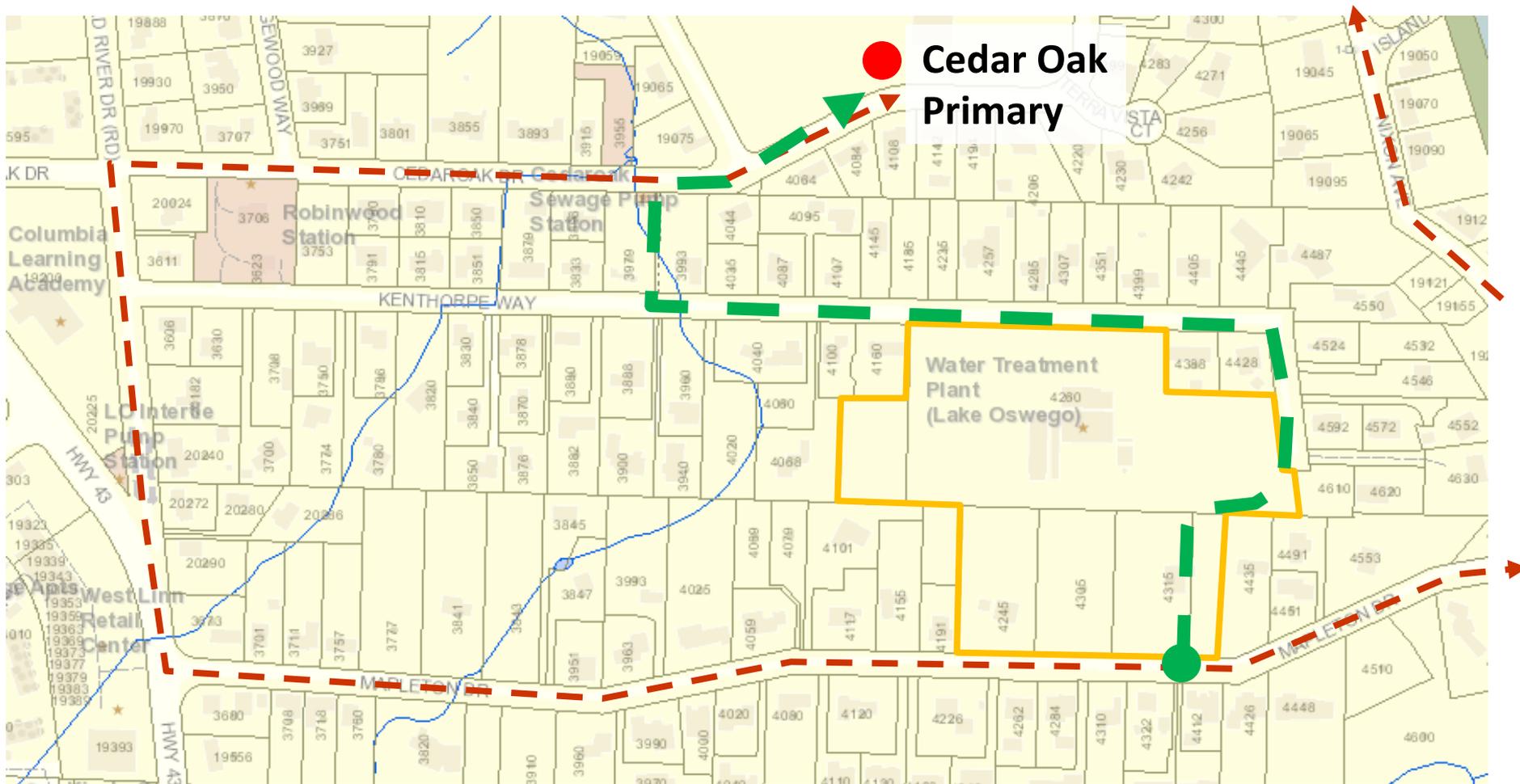


RWP/FWP



Staff Response

Through-site Connection



Water Treatment Plant



RWP/FWP



Staff Response



Proposed Site Plan – Fencing Detail

Fencing



① Split-rail Fence



② View from Plant Side of Fence
Good Neighbor Fence



③ View from Plant Side of Fence
Good Neighbor Fence w/ Security Mesh

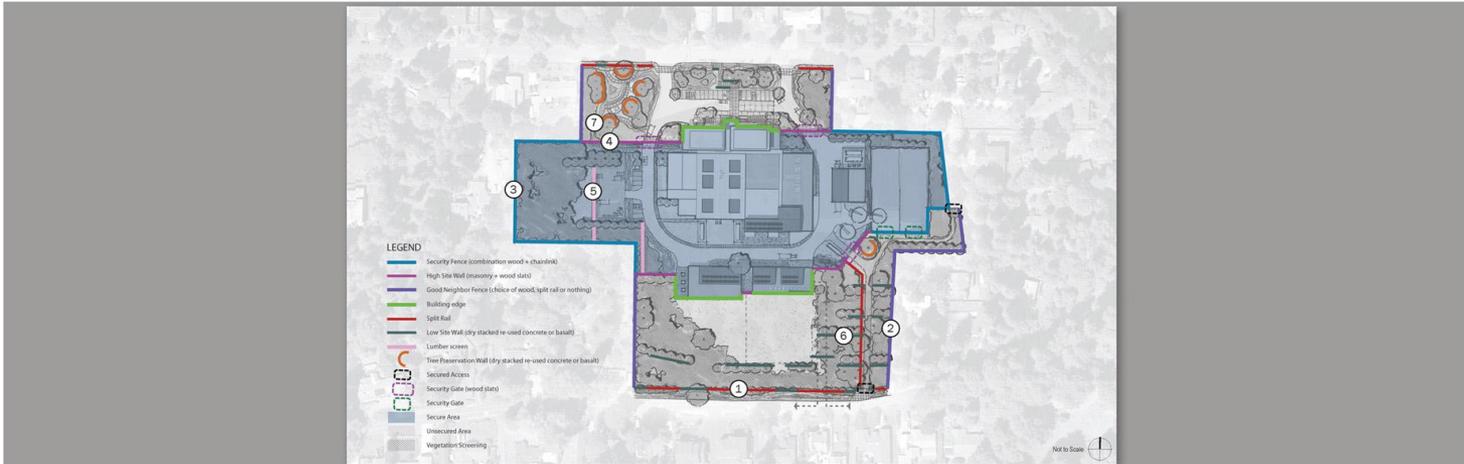
Walls + Screens



④ High Site Wall



⑤ Lumber Screen



① Split-rail Fence



① Split-rail Fence



② Good Neighbor Fence



⑥ Re-used concrete for Low Site Wall



⑦ Dry-stacked stone for Tree Preservation Wall



Site Rendering from Kenthorpe Way



Kenthorpe Operations Entrance



Water Treatment Plant



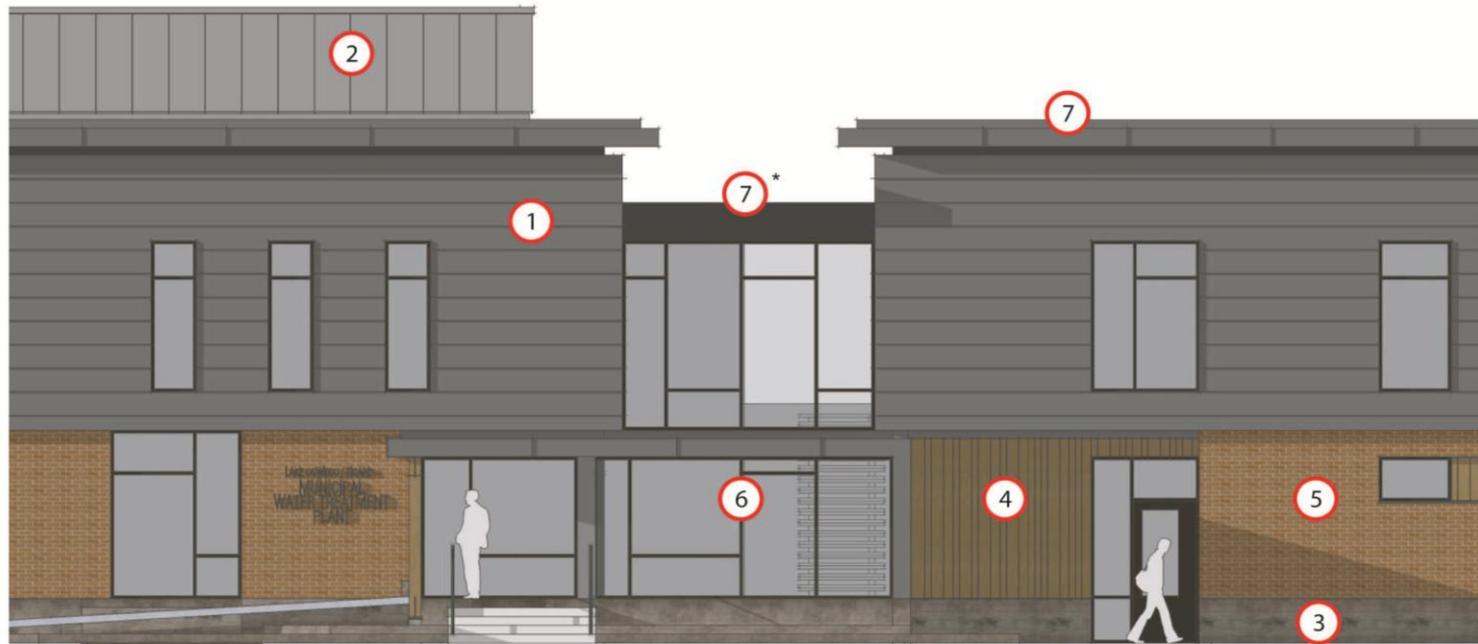
RWP/FWP



Staff Response



Site Plan – Building Elevations



- 1. STANDING SEAM METAL PANEL
- 2. INTEGRAL COLOR COMPOSITE PANEL
- 3. HORIZONTAL BOARD FORM CONCRETE
- 4. RECLAIMED WOOD BOARDS (*VARYING WIDTHS*)

- 5. BRICK VENEER
- 6. DARK ANODIZED ALUMINUM STOREFRONT
- 7. PRE PAINTED MTL. FLASHING / FASCIA
* at location of new lobby mtl. fascia to match dark anodized storefront



Water Treatment Plant

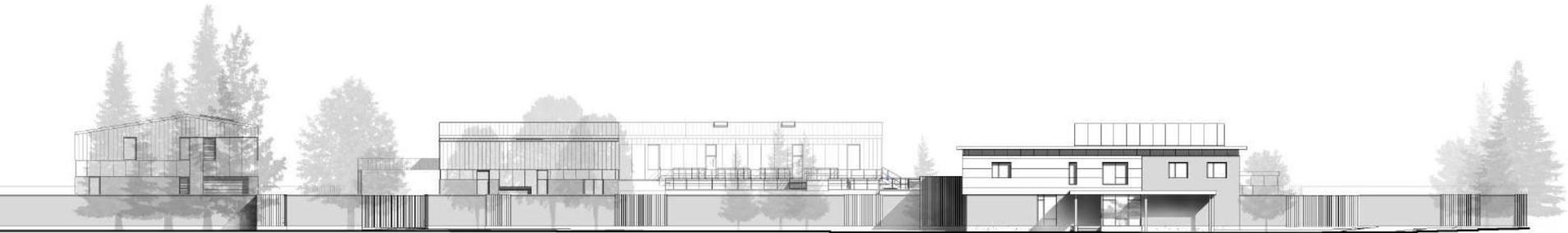


RWP/FWP



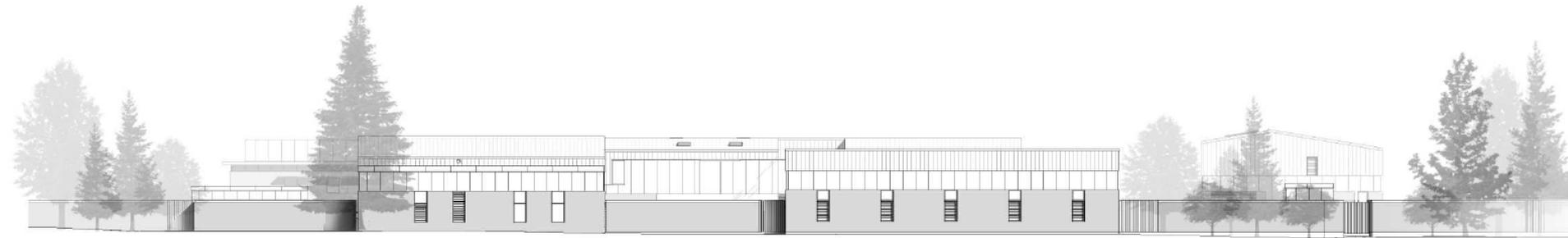
Staff Response

Site Plan – Building Elevations



NORTH ELEVATION
1/16" = 1'-0"

1



SOUTH ELEVATION
1/16" = 1'-0"

2



Water Treatment Plant



RWP/FWP



Staff Response



- 🍃 Ongoing (post-construction)
 - Net **decrease in traffic** by 25 ADT
 - **Reduced noise** from existing
 - 9 percent increase in footprint
 - **Improved public safety**

- 🍃 During Construction
 - Daytime **noise**
 - Construction **traffic**
 - Public **safety**

Impact Mitigation – Noise



- Meets DEQ noise standards
- Post-construction noise analysis
- Prohibit backup alarms during evening hours
- Notify neighbors of after-hours construction requests
- Site design reduces noise (partially enclosed chemical delivery area, elimination of compressor, noise generating equipment near center of site)
- Removal of Operations Building shortens construction duration by 4 months (32- to 28-months)



Impact Mitigation – Construction Traffic



- Workers bussed from off-site (reduces trips by 150/day)
- Elimination of Operations Building reduces construction duration by 4-months
- Clearwell reduced from 3 million to 2 million gallons
- Low sulfur fuel vehicles
- Contact list to City and Neighborhood Association Chairpersons
- No on-street parking
- Construction Management and Good Neighbor Plans detail additional steps to mitigate construction impacts





Ongoing

- Upgrade meets latest seismic standards
- Independent review of Seismic Analysis confirms original findings
- City’s emergency water supply assumptions rely on increased capacity at Plant
- Safe Operations Plan (secure site design, durable materials, redundancy, hazardous materials containment, inspection and testing, asset management)
- Proposal allows controlled north/south access for residents during emergencies on Kenthorpe Way

During Construction

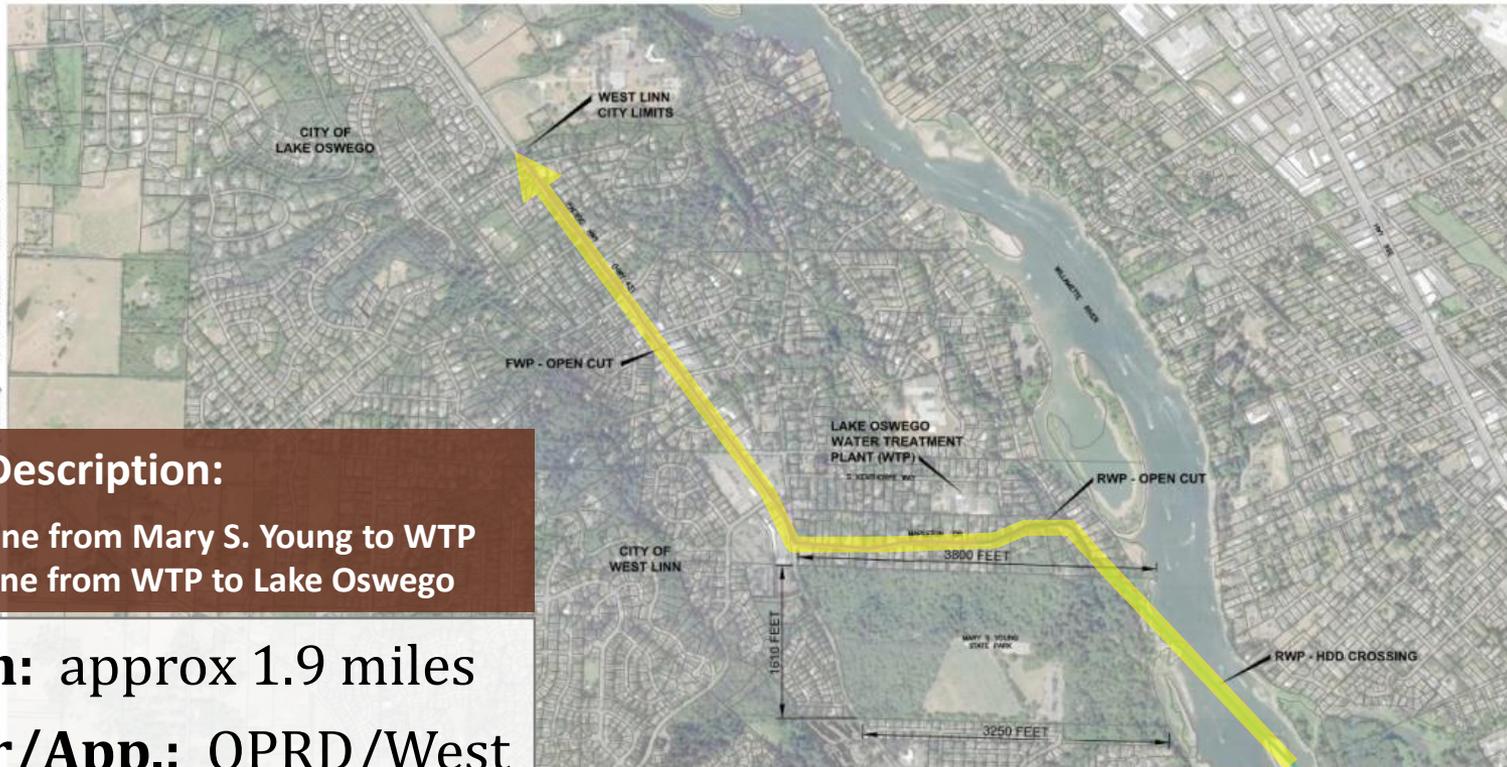
- Emergency response plan coordinated with TVF&R and West Linn Police Dept. and annual TVF&R inspections



Good Neighbor Plan:

- Ongoing communications (project ombudsman, coffee with construction manager, regular meetings with Robinwood Neighborhood Association, 60 days notice to all property owners within 500-ft of staging area of drilling operation)
- Routine communications with emergency providers

Pipeline



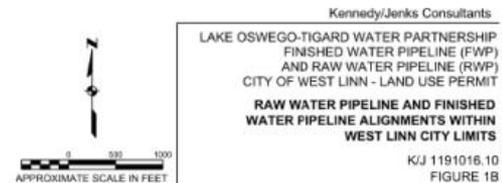
Project Description:

- 42-inch line from Mary S. Young to WTP
- 48-inch line from WTP to Lake Oswego

Length: approx 1.9 miles

Owner/App.: OPRD/West Linn/ODOT

Zoning: R-10, R-4.5, GC



Water Treatment Plant



RWP/FWP



Staff Response

Pipeline



Water Treatment Plant

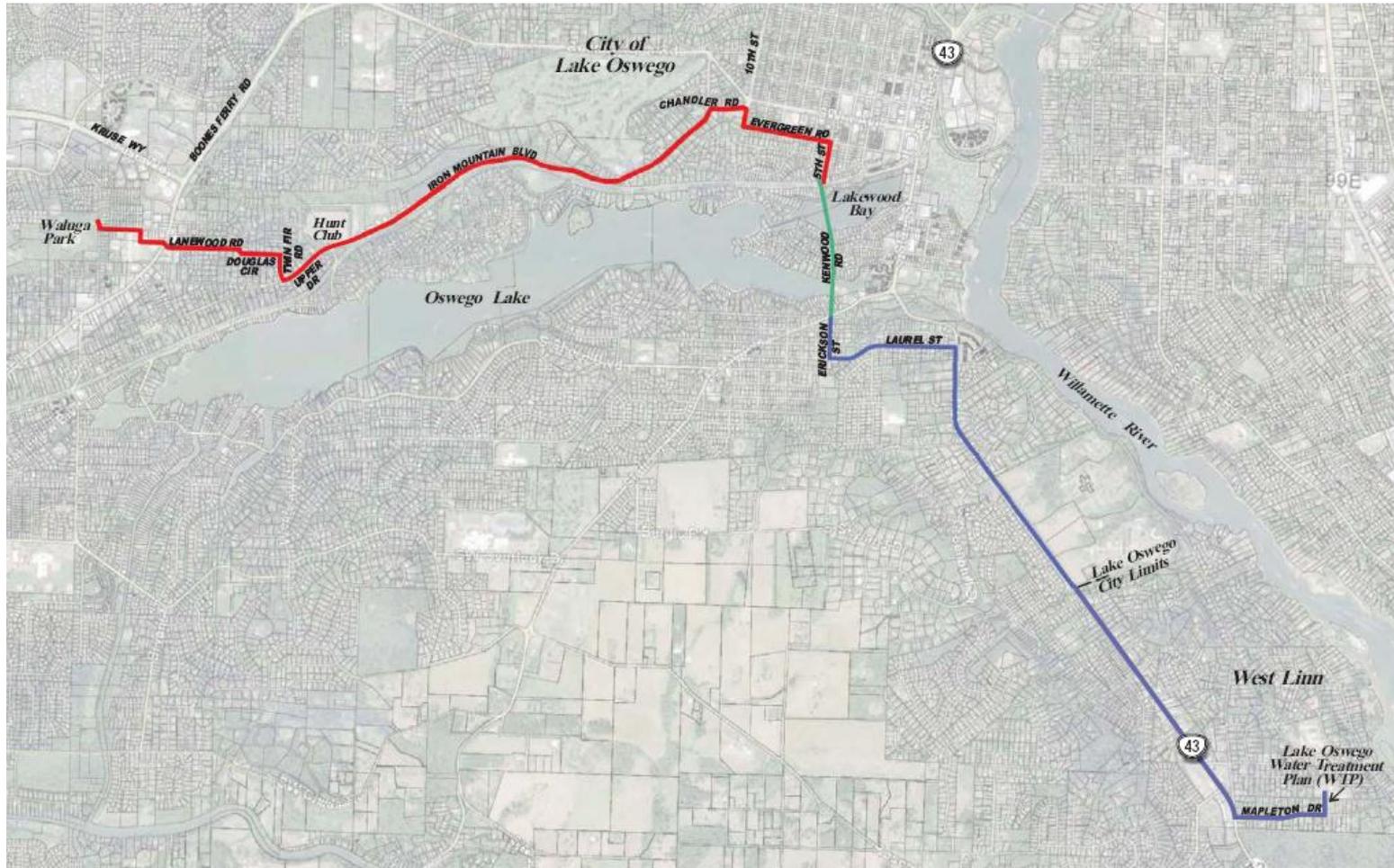


RWP/FWP



Staff Response

Pipeline



Water Treatment Plant



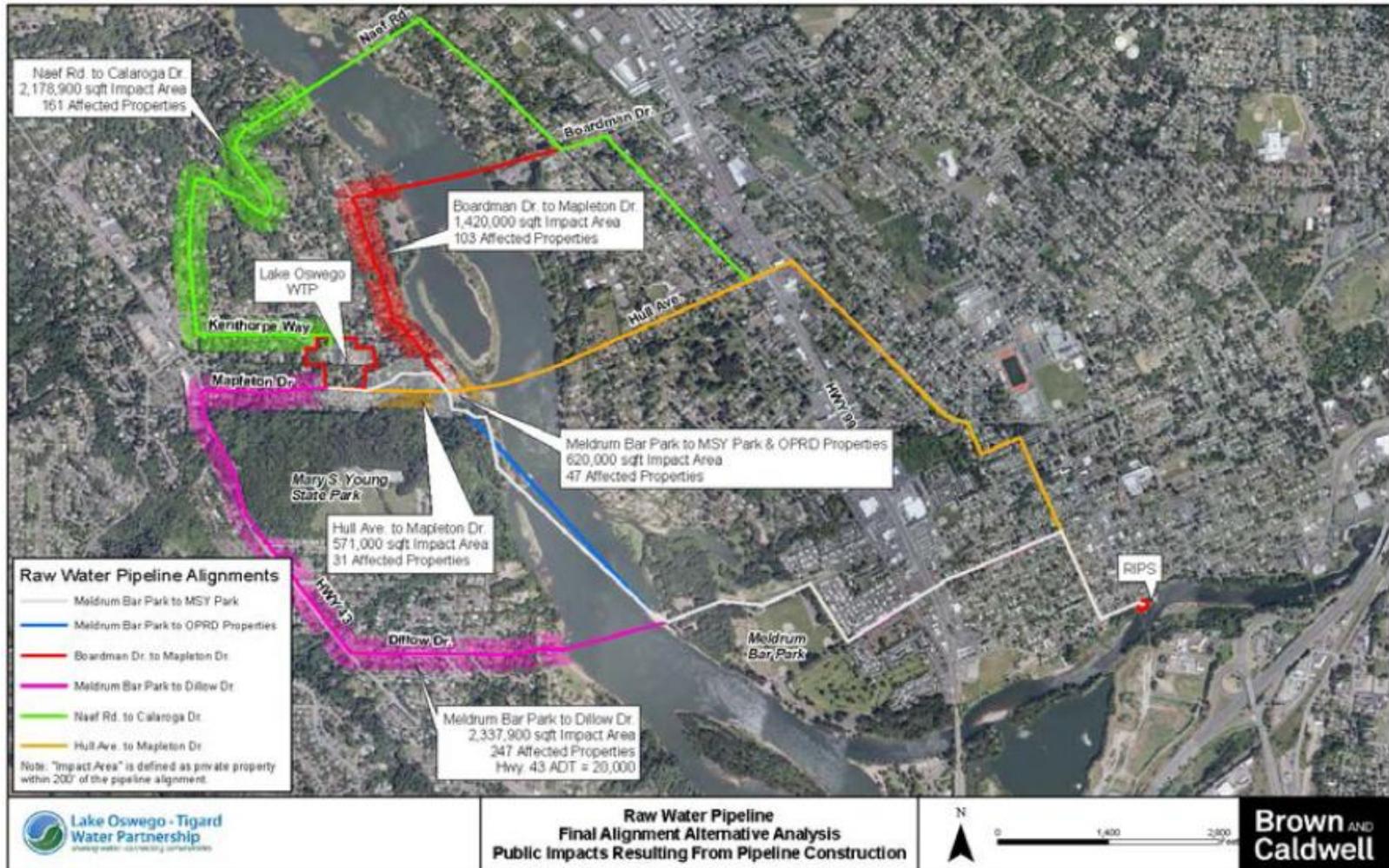
RWP/FWP



Staff Response



Pipeline – alternatives analysis



Water Treatment Plant



RWP/FWP



Staff Response



Pipeline – Water Resource Areas

Water Resource Areas

- Pipe depth of 34- to 60-feet avoids impacts
- No impacts to wetlands, streams and riparian corridors in MSY Park



Water Treatment Plant



RWP/FWP



Staff Response



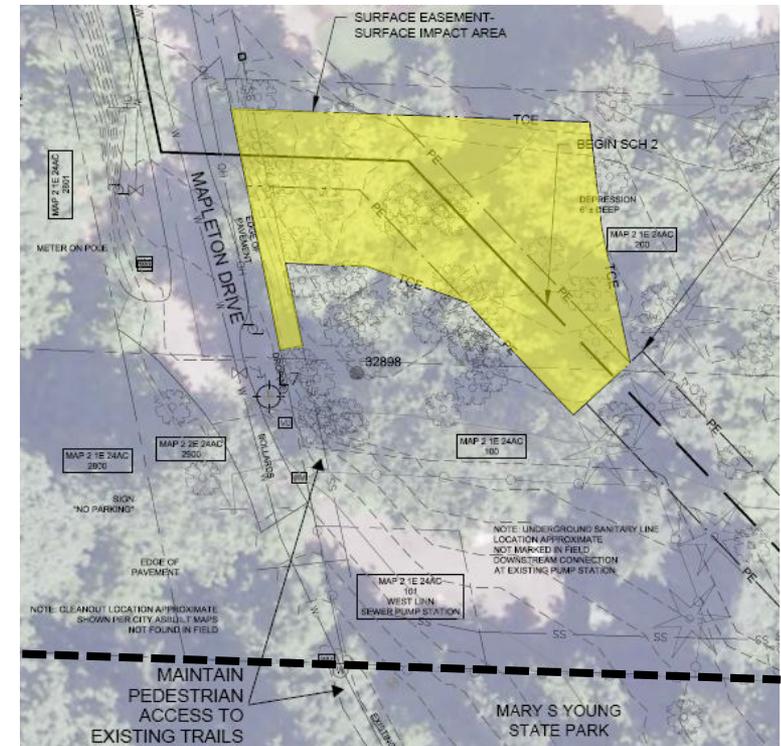
Drilling Staging Area – Construction Impacts

Construction Impacts

- Temporary disturbance on OPRD lots (remove 19 non-significant trees)
 - Revegetation and restoration proposed
- Noise (daytime and during pullback)
 - Sound wall
 - Acoustic blankets and enclosures
 - 55-66 dBA daytime noise
 - 65-72 dBA intermittent noise

Ongoing impacts

- Improved seismic resiliency
- Full restoration of Mapleton Drive
- Replace 6-in West Linn water line in Mapleton Drive



Pipeline - phasing



Phase	Anticipated start of construction	Anticipated end of construction	Estimated construction duration
HDD Construction	March-14	October-14	6 months
West Linn AC replacement	October-14	November-14	6 weeks
Pipe installation on Mapleton Drive	November-14	March-15	3 months
Pipe installation on Highway 43	June-14	August-14	5 months





Pipeline – Anticipated Truck Trips

Avg. daily trips

- 32 ADT during drilling
- 144 ADT during drill pullback
- 86 ADT during trench on Hwy 43 and Mapleton

Traffic mitigation

- Limit construction to 100- to 150-ft section of roadway
- Workers bussed in from off-site
- Phasing off-sets day and evening trips
- Truck routing

Phase	Truck trips per Hour ²	Typical work hours
HDD construction (via Mapleton Drive) – normal	2	7 a.m. to 7 p.m.
HDD construction (via Mapleton Drive) – pullback	6	NA ³
Open-cut construction on Mapleton Drive	6	7 a.m. to 7 p.m.
Open-cut construction on Highway 43	8	8 p.m. to 5 a.m.

Intersection	Average Delay (Sec)	
	Existing Conditions	With WTP & FWP Volumes
AM PEAK HOUR		
OR43/Lazy River Dr	16.7	16.7
OR43/Cedaroak Dr	22.7	26.7
OR43/Hidden Springs Rd	21.7	24.3
PM PEAK HOUR		
OR43/Lazy River Dr	17.7	17.7
OR43/Cedaroak Dr	11.2	14.2
OR43/Hidden Springs Rd	20.1	20.9



Truck Routing



Water Treatment Plant

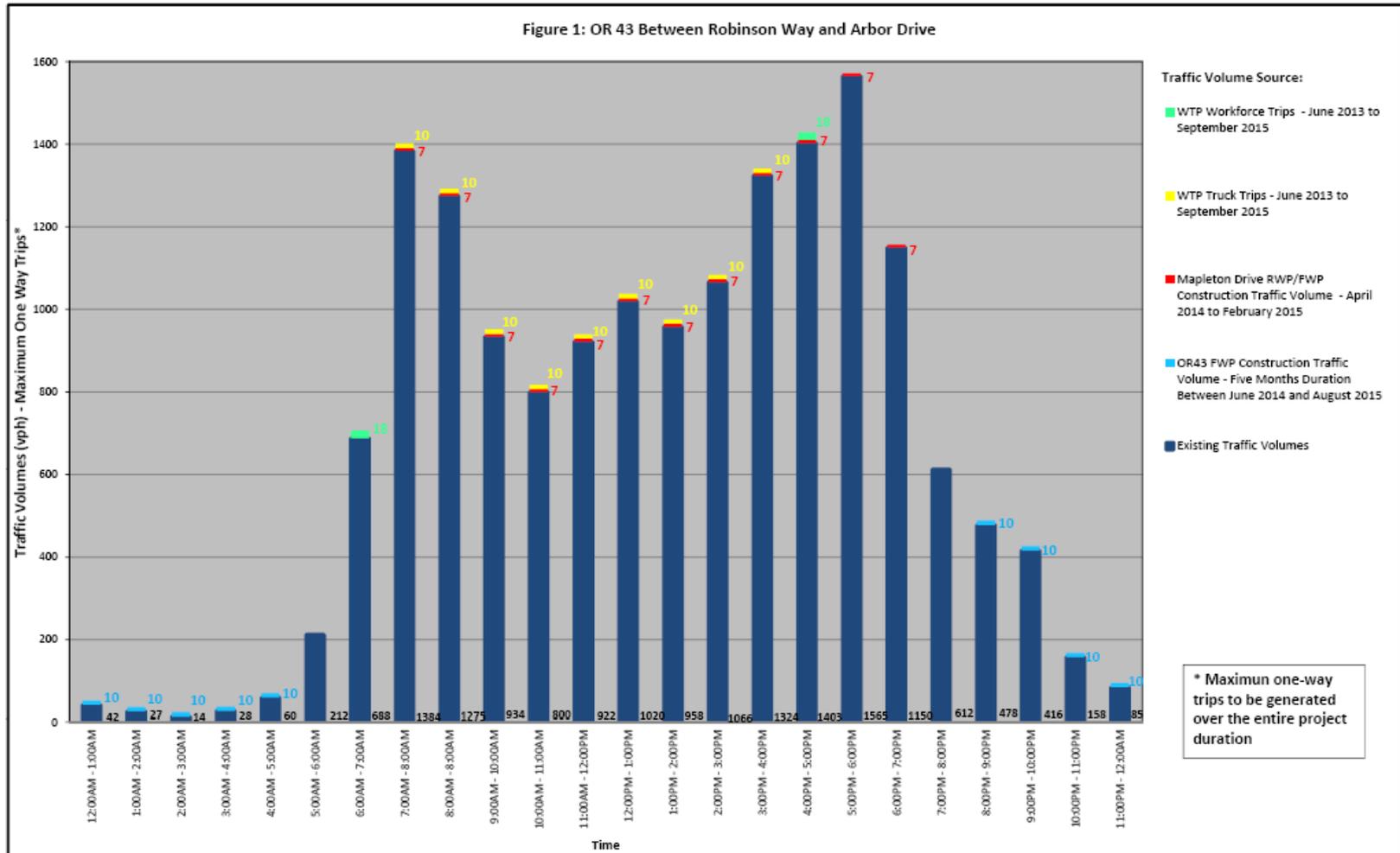


RWP/FWP



Staff Response

Highway 43 Volume Analysis



Water Treatment Plant



RWP/FWP

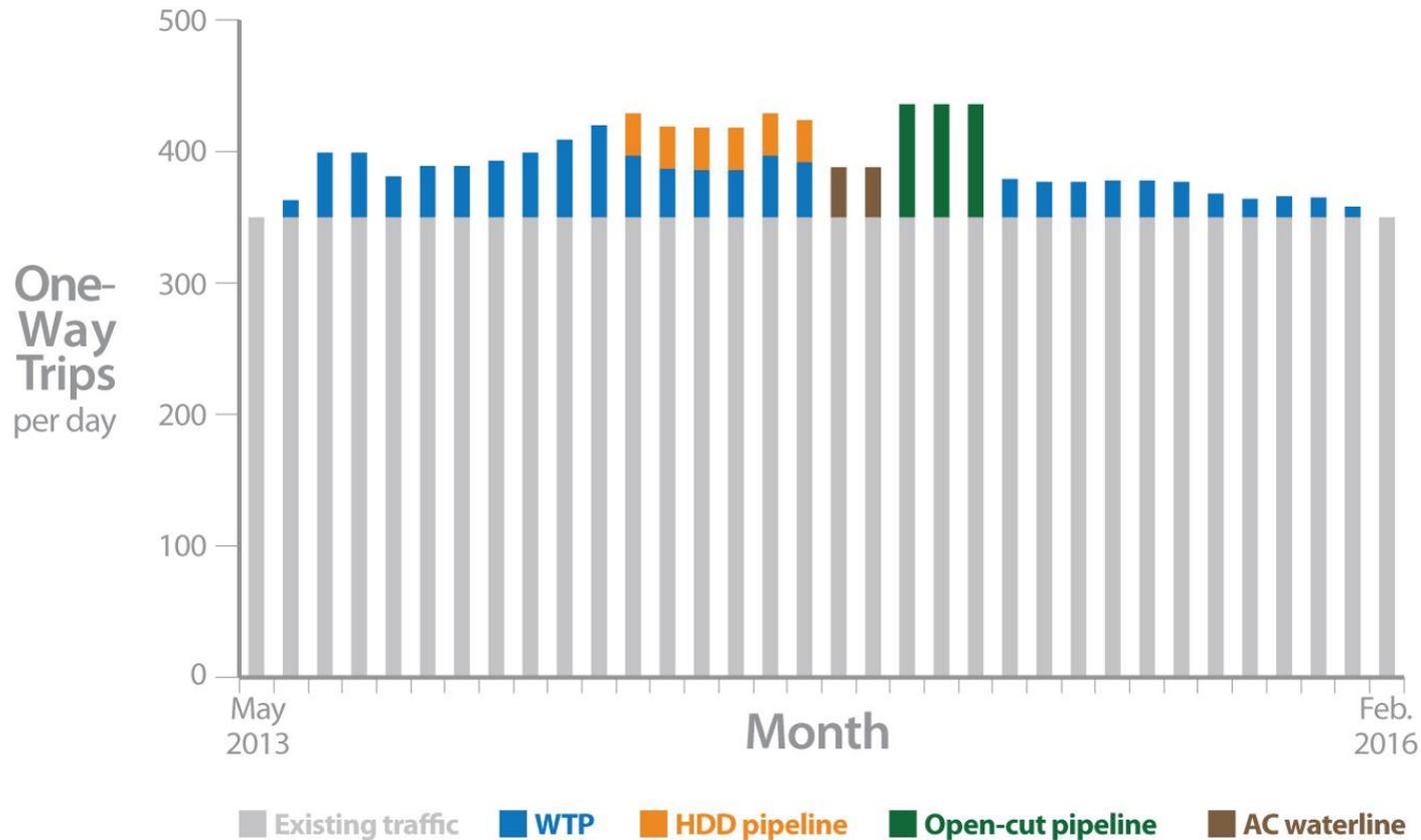


Staff Response

Project scheduling minimizes construction traffic impact



Mapleton Drive Combined Construction Traffic



Water Treatment Plant



RWP/FWP

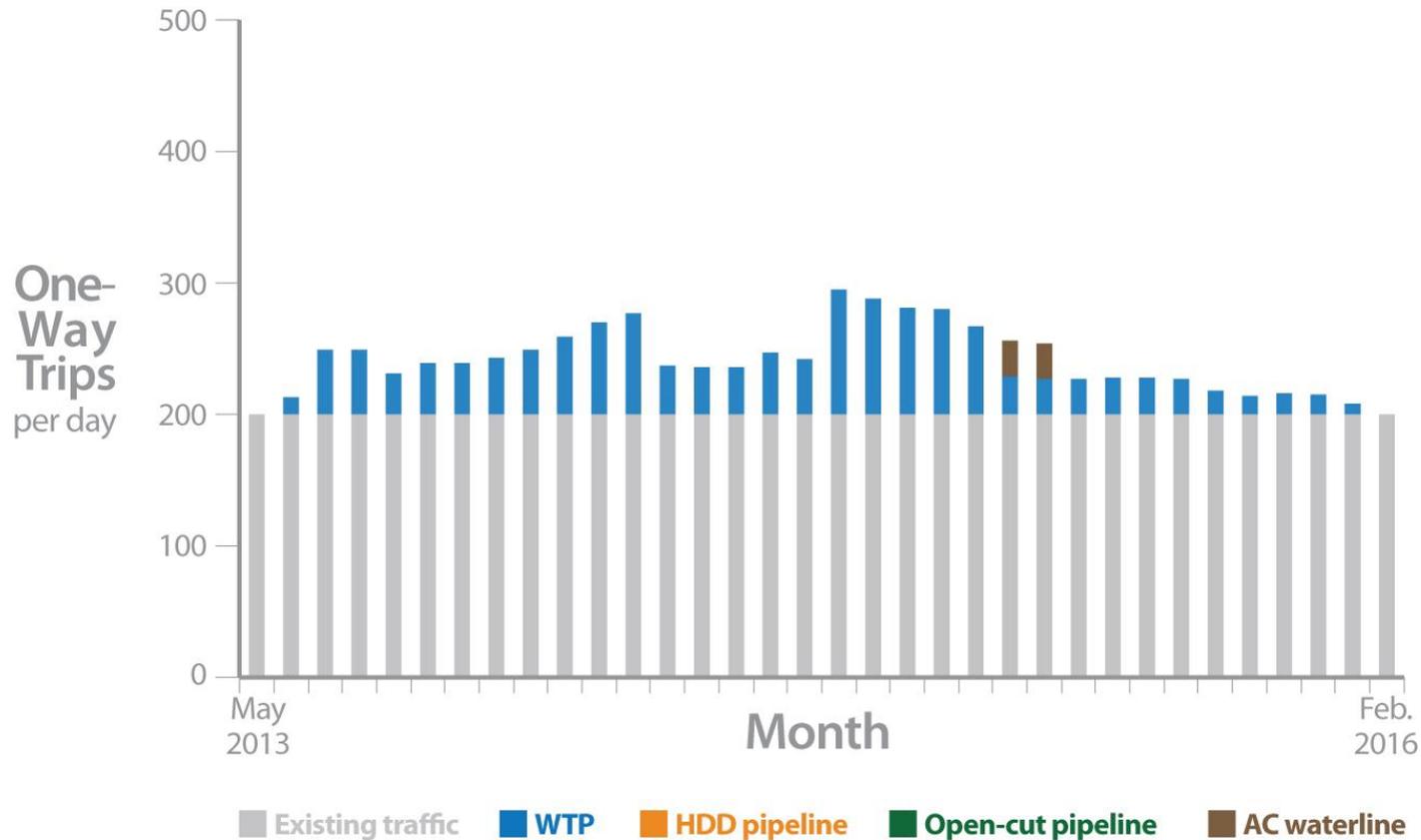


Staff Response

Project scheduling minimizes construction traffic impact



Kenthorpe Way Combined Construction Traffic



Water Treatment Plant



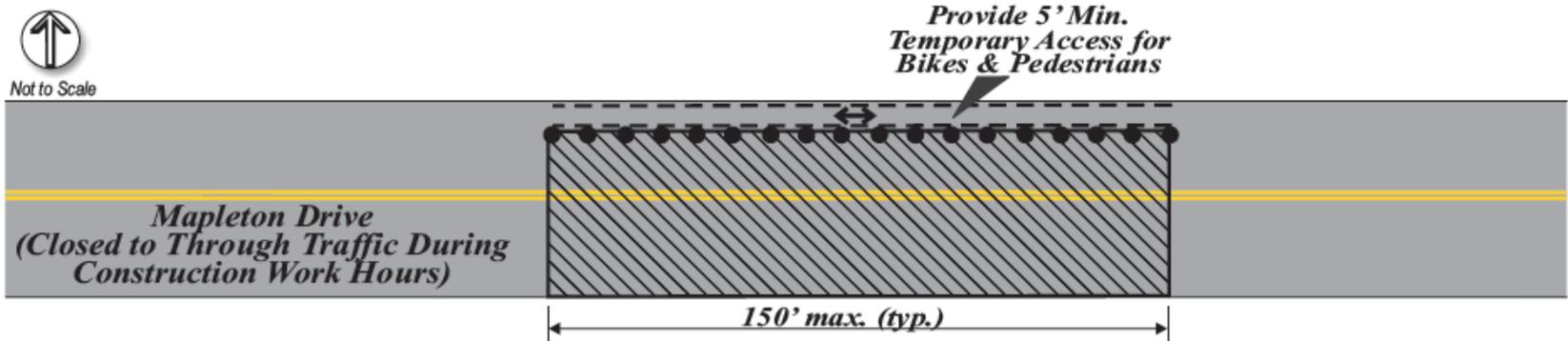
RWP/FWP



Staff Response



Open Trench Construction



Water Treatment Plant



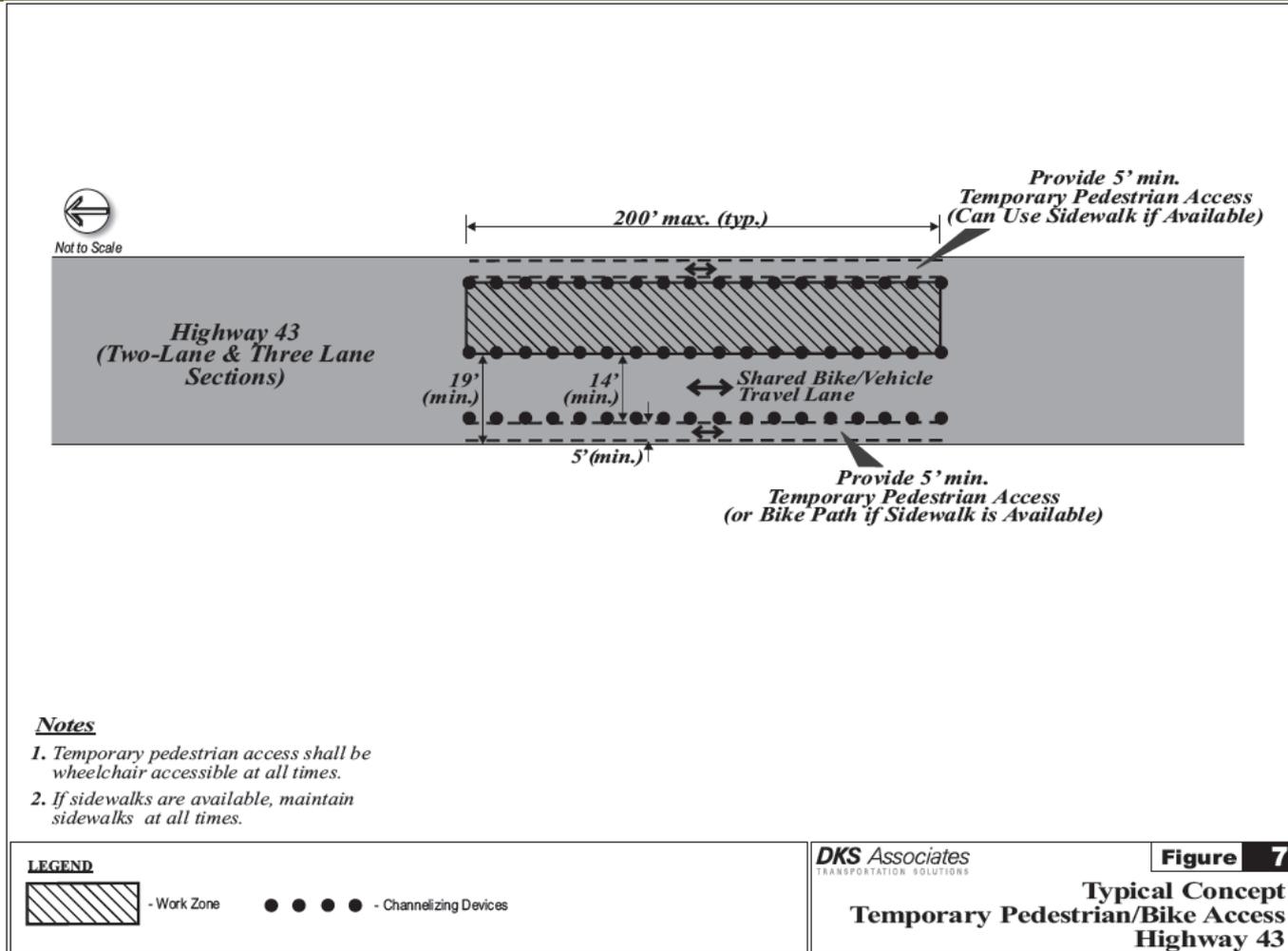
RWP/FWP



Staff Response

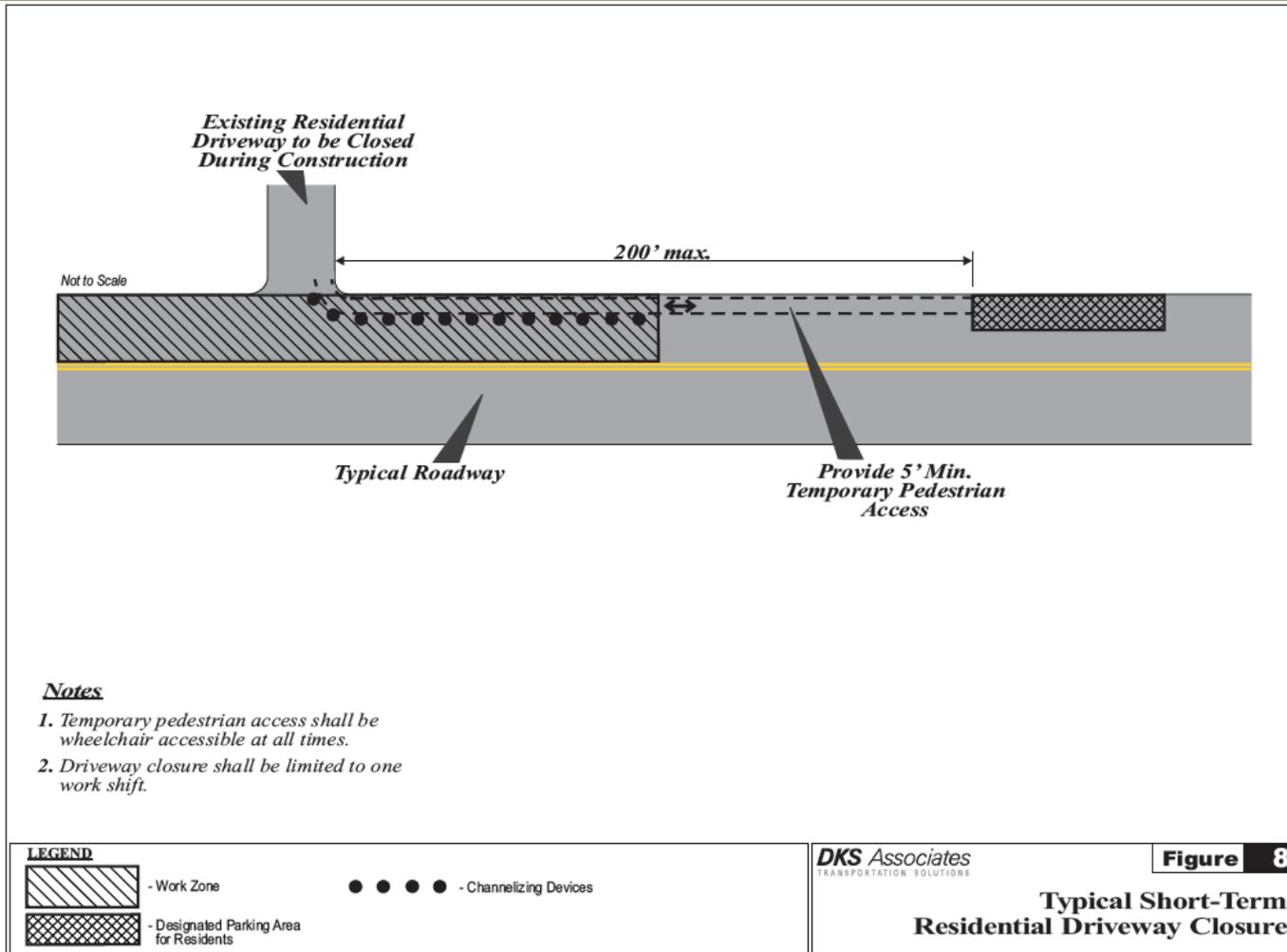


Open Trench Construction – Hwy 43



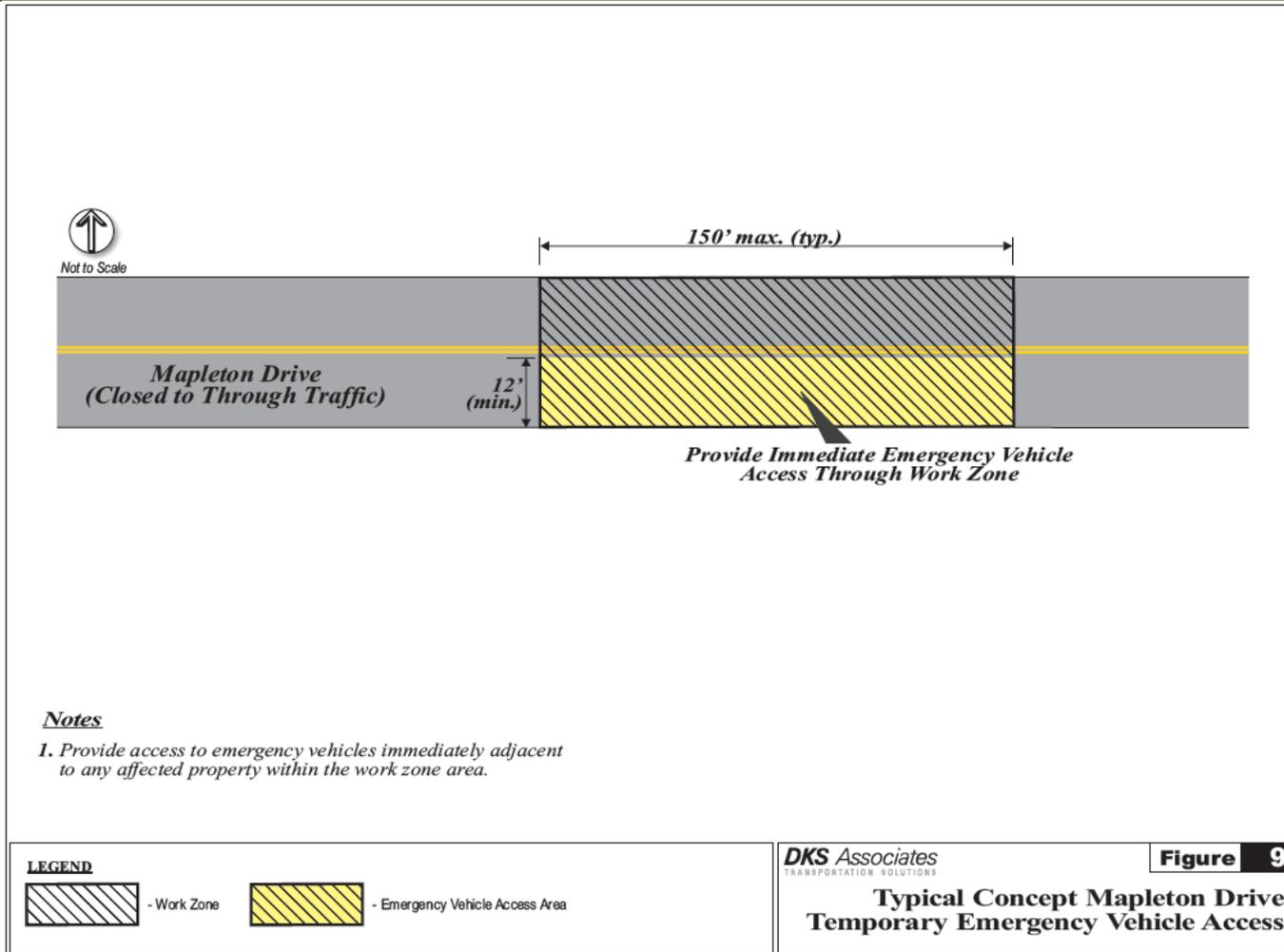


Open Trench Construction – Access closures





Open Trench Construction – Emergency Access

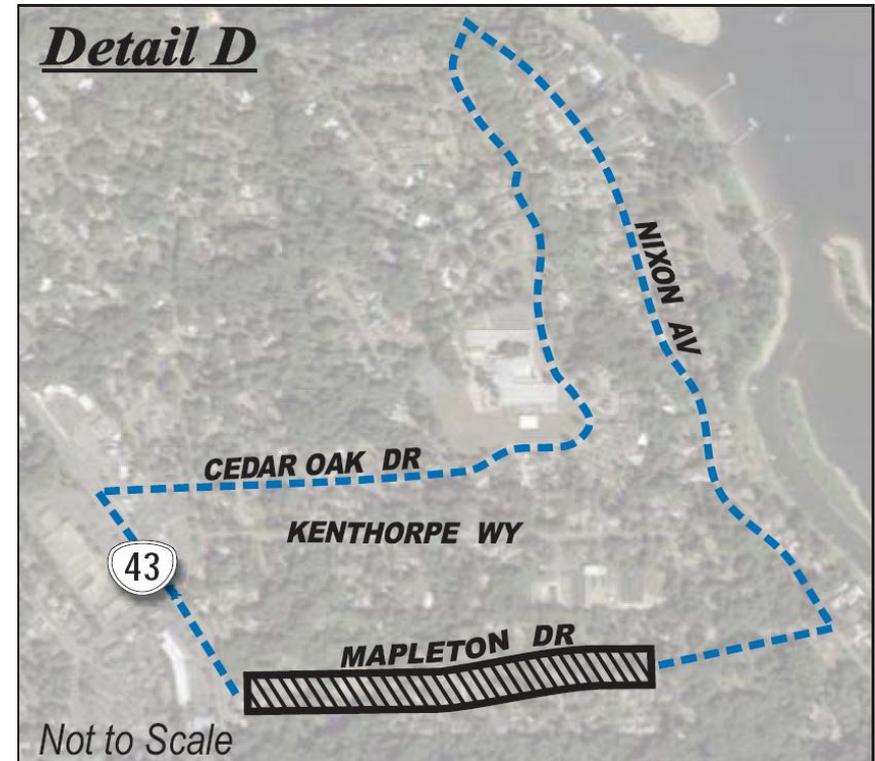


Open Cut Trench Construction – Residential Detour



🍃 Nixon Ave Detour

- Mapleton closed to through vehicles
- In place for 3 months
 - 7am-7pm weekdays
 - 9am-5pm weekends and holidays
- Traffic control at Nixon/Mapleton



Planning Commission Decision



- ◆ Planning Commission found the proposals inconsistent with CDC 60.070
 - The proposals are **not consistent with the overall needs** of the community
 - The characteristics of the site are **not suitable** for the proposed uses
 - The proposals are **inconsistent with the applicable policies of the Comprehensive Plan**





Planning Commission Findings

60.070(A)(3): the facility is consistent with the needs of the community

- ◆ Facility is **not** consistent with the needs of the community:
 - Does not serve primarily the citizens of West Linn
 - Project benefits do not outweigh impacts and are temporary
 - Benefits are temporary and not guaranteed
 - Significant public opposition expressed during public hearings





60.070(A)(1): the site size is adequate for the proposed use... and to mitigate possible adverse effects from the use on surrounding properties

- ◆ Site is **inadequate** for this use
 - Potential for seismically induced liquefaction of soils and slope failure
 - Safety concerns for children walking along Mapleton Drive during construction





Planning Commission Findings

60.070(A)(7): is the proposal consistent with the applicable policies of the West Linn Comprehensive Plan?

- ◆ Facility is **not** consistent with the Comprehensive Plan:
 - Does not protect residentially zoned land
 - Allows development of Stafford Triangle
 - Impacts quality of life; is counter to the wishes of citizens and Neighborhood Associations





Third Party Reviews Confirm Original Findings

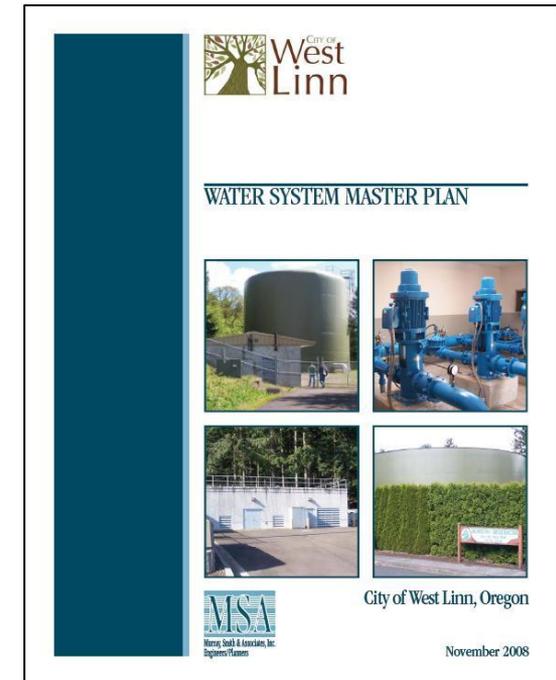
- ◆ Additional 3rd Party reviews submitted by Partnership since Planning Commission decision
 - Another 3rd Party review of Seismic Analysis
 - 3rd Party review of Traffic Analysis
 - 3rd Party review of Construction Management Plan





Water System Master Plan (WSMP)

- ◆ Purpose: To provide an assessment of the City's water system which identifies system deficiencies, projects future system requirements, and recommends improvements to meet both current and future needs.
- ◆ Last updated in 2008
 - Prepared by Murray Smith and Associates.
 - Approved by Utility Advisory Board.
 - Approved by Planning Commission on 10/15/08.
 - Approved and adopted by Council on 11/10/08.



- ◆ Classified as a supporting document to the West Linn Comprehensive Plan.
- ◆ The WSMP identifies improving the supply capacity and reliability of the Lake Oswego connection as the preferred method for meeting system performance requirements and acceptable levels of service in emergency conditions.





Water System Master Plan (WSMP)

Consistency with the adopted WSMP

- Partnership’s proposed expansion **meets the City’s needs** for a reliable backup supply system with adequate capacity. This includes guarantees of supply to 2041 and beyond.
- Partnership’s connection provides the **City with access to significant storage** and other water supply sources, including Portland, as further reliability enhancement.
- Partnership’s proposal to provide this supply **at no cost to the City saves \$2.2 million** over the intertie enhancement cost assumed in the WSMP.

Alternative

- The City’s next best alternative to meet acceptable reliability needs is to construct a new finished water transmission main at an **estimated cost of \$11.6 million** per Murray Smith and Associates.
- **Requires construction** similar to that of the Partnership’s project through Bolton and Oregon City.
- **Less reliable** than that offered by the full redundancy of the Partnership’s proposed improvements.
- Impact to West Linn water rates
 - *Alternative construction would require a minimum \$7.15 per month rate increase for all West Linn water customers.*





Questions

Lake Oswego - Tigard Water Partnership
Water Treatment Plant/Raw- and Finished-water Pipeline



Water Treatment Plant



RWP/FWP



Staff Response

4. Benefit to Community



- CDC 60.070(3), “The granting of the proposal will provide for a facility that is consistent with the **overall needs of the community.**” (emphasis added)



Approval subject to conditions

- Implement recommendations from Good Neighbor Plan, Const. Mgmt. Plan, Safe Operations Plan, etc. *(p.14 and Exhibit PC-3)*
- Restore impacted streets and utilities – applicant has offered as COA to resurface entire length and width of Mapleton Dr. *(p.14)*
- 6-inch AC pipe replacement in Mapleton Dr. *(p.15)*
- Traffic control at intersection of Nixon Ave. and Mapleton Dr. *(p.15)*





For more than forty years the Oregon land use system has rested upon the foundational principle that a local government and those who choose to develop property within that jurisdiction have a right to certainty. Under the Oregon land use system, everyone has a right to know exactly what rules are in play and, once adopted, those rules are not to be changed during the development review process. A city or county creates certainty through the adoption of a comprehensive plan, development regulations, engineering standards, and supporting

information, telecommunication and telephone cable, and includes facilities for the generation of electricity, or similar service. There are two classes of utilities – major and minor:

Utility, major. A utility facility or service that will have, or the installation of which will have, a significant impact on the surrounding uses or the community in terms of generating or disrupting traffic, interfering with access to adjacent properties, creating noise or causing adverse visual effects. “Major utility” includes, but is not limited to, a substation, pump station, water storage tank, sewer plant, transmission lines for water, drainage or sewerage collection systems, gas or electric, or other similar use.

Utility, minor. A utility facility or service that will have, or the installation of which will have, a minor impact on the surrounding uses or on the community in terms of generating or disrupting traffic or access to adjacent properties, creating noise or causing adverse visual effects. “Minor utility” includes, but is not limited to, overhead or underground electric, telephone or cable television poles and wires, distribution lines for electric, gas, water, drainage or sewerage collection systems, or other similar use.

Variance. A discretionary decision to permit modification of the terms of an implementing ordinance based upon specific findings delineated in the Community Code for similar situations.

sion to allow the sentiment of the citizens' recommendations made in adopted West Linn

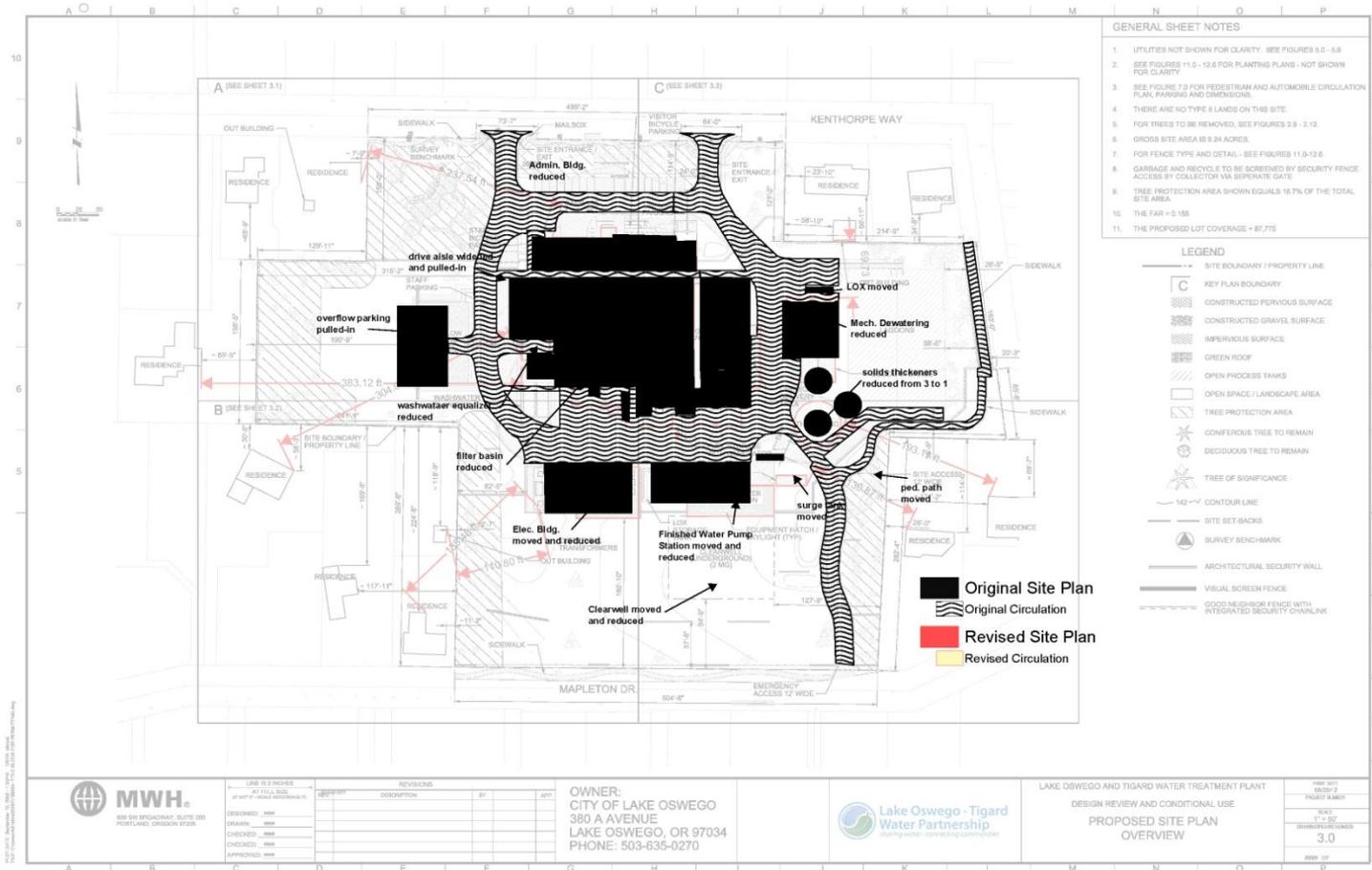
in our land use experience, we have not seen temporary variances considered as a critical part of a conditional use application. This is not involved outside of a land use case among local agency staff, nor is there participation from the neighborhood. In our professional experience, the implementation plan goes above and beyond what is typically required and certainly it appears that much thought and effort was expended much earlier than for similar projects. Again, in our experience, no notable safety issues arise as a result of construction in

Recommended Conditions of Approval

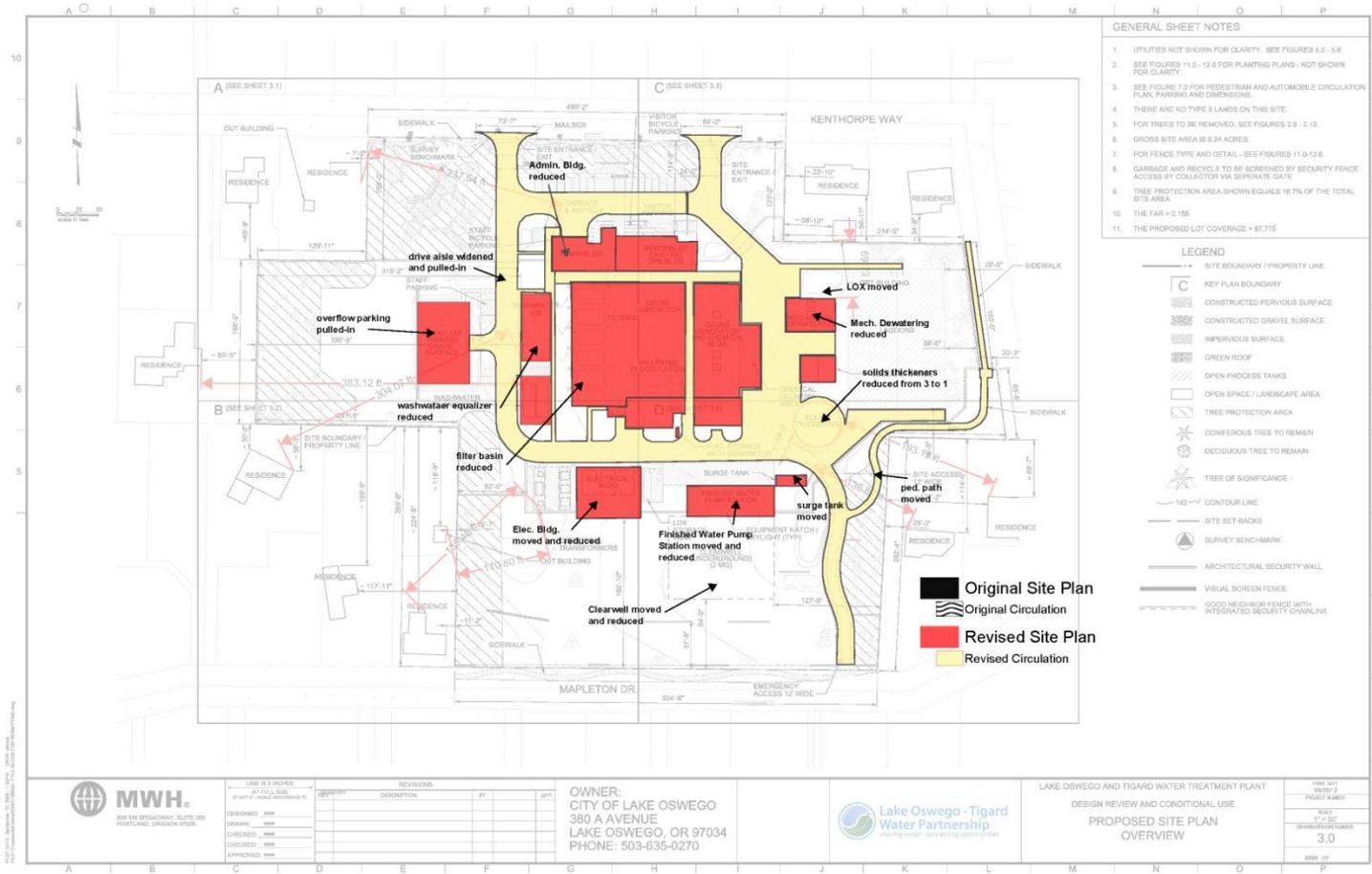


- Conditions of Approval

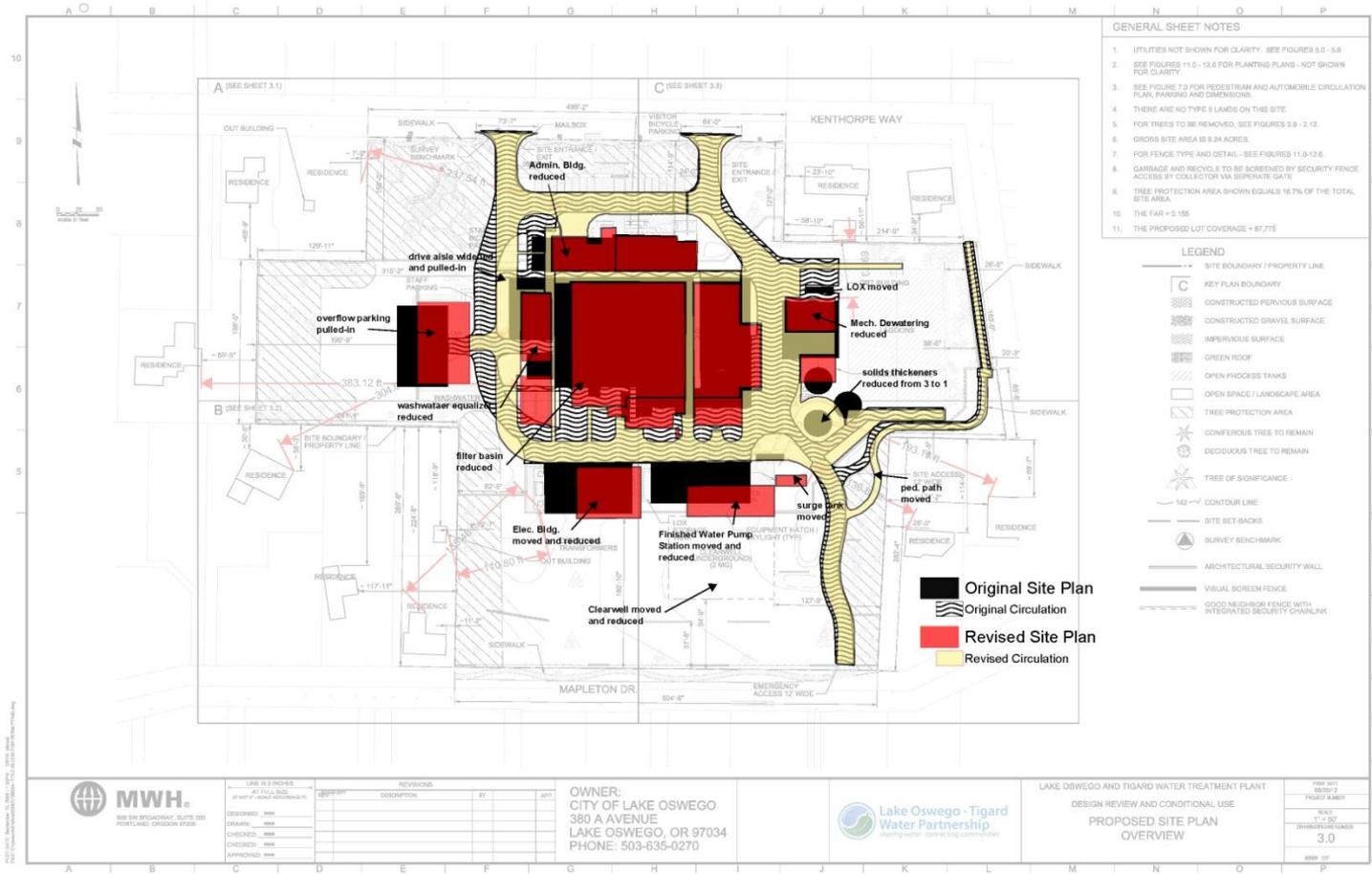
Original Site Plan Proposal



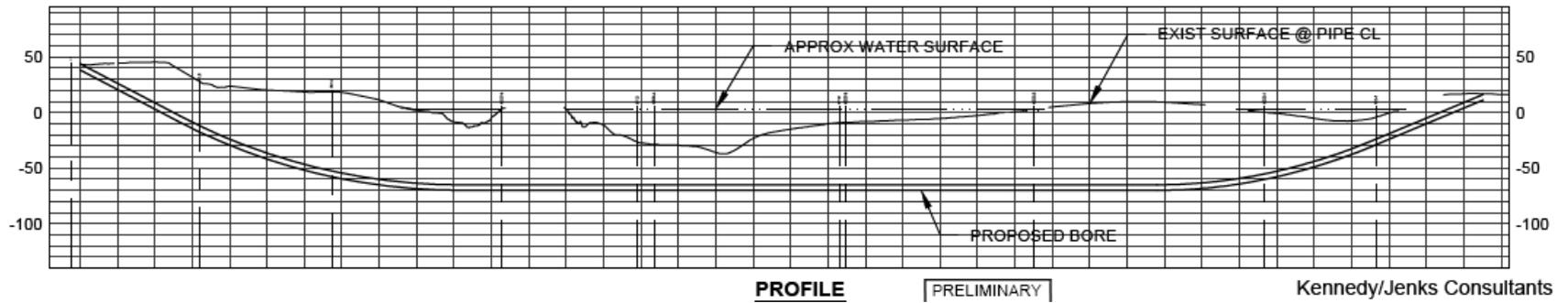
Revised Site Plan



Revisions to Site Plan Proposal



Proposal avoids impacts to WRAs





Planning Commission Findings

60.070(A)(3): the facility is consistent with the needs of the community

- Facility is **not** consistent with the needs of the community:
 - Does not serve primarily the citizens of West Linn
 - Project benefits do not outweigh impacts and are temporary
 - Benefits are temporary and not guaranteed
 - Significant public opposition expressed during public hearings

Appellant's Assertion:

Staff Response:

- **Need satisfied** per recommendation in Water Master Plan
- Project advances other City policies (pedestrian connectivity, open space, increased safety)
- Many Conditional Uses serve non-West Linn residents (Fire, Schools, VA)
- **CDC does not require "net benefit"**
- Proposal provides opportunity to meet needs at a **cost savings of approx. \$11 million** – and guarantees 4MGD to 2041





60.070(A)(1): the site size is adequate for the proposed use... and to mitigate possible adverse effects from the use on surrounding properties

- Site is **inadequate** for this use
 - Potential for seismically induced liquefaction of soils and slope failure
 - Safety concerns for children walking along Mapleton Drive during construction

Staff Response:

- WTP **in operation since 1968** (received three CU approvals)
- Increased site area allows **more buffering** (trees, fences and open space)
- Appellant’s geotechnical analysis confirms **ability to withstand magnitude 9.0 earthquake**
- Appellant’s construction management plan includes pedestrian access through construction zone
- TVF&R confirms plan is **consistent with emergency response standards**





Planning Commission Findings

60.070(A)(7): is the proposal consistent with the applicable policies of the West Linn Comprehensive Plan?

- ◆ Facility is **not** consistent with the Comprehensive Plan:
 - Does not protect residentially zoned land
 - Allows development of Stafford Triangle
 - Impacts quality of life; is counter to the wishes of citizens and Neighborhood Associations

Staff Response:

- The WTP is **compatible with adjacent structures**
- **Improves seismic resiliency**
- **CDC allows Conditional Uses** (and Major Utilities) in residential zones
 - Major Utility: *“A facility that will have or may be expected to have significant impacts on the surrounding uses or community...”*
- WSMP is supporting document to Comprehensive Plan
 - Directs city to pursue partnership with LO and Tigard to improve supply reliability of the LO-West Linn emergency intertie

